The Builder.

VOL. XXXIII. No. 1698. SATURDAY, JUNE 12, 1875.

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Old Architecture, and its Preservation.

READERS of this journal are aware that we have always, as on every consideration we are bound to do, given our support in favour of the preservation of old buildings, as far as possible, in the midst of the changes rendered necessary in the progress of town improvements; and even when the ultimate fate of an old building appeared to be only a question of time, we have always preferred to be among those who defer the day of destruction as long as can reasonably be done. The question is not without its difficulties; and as the real relative importance of old buildings and new improvements is often not duly balanced in these cases, perhaps the value of old association and historical evidence, and the extent to which these should influence us in any consideration affecting the destruction or preservation of buildings which have the prestige of age, is one on which a suggestion may be seasonably offered.

The matter assumes a different aspect in proportion as the buildings to be dealt with are or are not of inherent architectural value. The former case has been before the profession for long enough, in the most extensive possible form, in the proceedings arising out of the great restoration movement among the custodians of our churches and cathedrals. Of the preservation of the architecture of the Middle Ages, in every way possible, scarcely a difference of opinion, we surmise, exists, in spite of some recent doings. But the question as to the method of effecting this preservation, and the principle to be adopted, is by no means so unanimously settled, and has been the subject of not a few discussions and observations in our own columns. Where a building is no longer safe, and cannot be made so, of course there is no more to say in the matter; it has to be removed. Where it is inconvenient and unsuitable for the most modern requirements, it then remains a question between the ultimate value of convenience or of architectural effect and association. The tendency of the present day is to exaggerate the importance of the former to a sometimes undue extent. In planning a new building convenience should of course be amongst the first things. In altering an old one the balance is not so easily struck between the practical and the architectural. It seldom happens that an old building is not susceptible of considerable modification in its arrangements without materially distorting its architectural countenance, and it should be felt in such a case that the preservation of architectural character is a definite gain worth sacrificing a little convenience for at times; a sacrifice which, in such cases, too, is sometimes more imaginary than real. We get into superstitions in these self-indulgent days as to what is necessary for the comfort of life, and are too ready to think that there is a necessity laid upon us to conform to requirements sanctioned rather by fashion and common consent than by any real necessity of things. There is further the problem, speaking in regard to buildings which are, or have been, of real architectural value, which arises when the architecture of an old building, evidently once fine and impressive, has suffered so much from time and decay as to be, though practically secure, but the ghost of its former self, almost obliterated, and shorn as to its architectural character. Yet such a building is venerable to all who have passed their lives in its immediate neighbourhood, and to whom it has become an important link in the chain of their associations. Do we in such a case show most reverence for the ancestral building by letting it moulder away untouched by the restorer's tools, or by gathering up the evidences of its original design before all trace of them is gone, and renewing this design in what we conclude to have been its primitive form, as far as we can ascertain? A great deal has been done on this latter principle, and in one or two cases whole churches or cathedrals have been cased with new work, professedly a repetition or resurrection of what was there before. Has this been too hastily done, and in too wholesale a manner? We think so, in some instances. Could we really restore the architectural design, undoubtedly, to its primitive state, there would be less room for question in the matter. But we can never do that; we seldom have records of every detail, and if we had, the hand and tool of the modern workman are not as those of the ancient one (we say not they are worse or better, only different), and what we have renewed is something of our own day, only in the dress of the past. Have we gained by the exchange? Scarcely, in many cases at least. The historic value of the old building, its associations with the life of the neighbourhood, and with the *genius loci* generally, have a real and definite æsthetic value equal in the main, perhaps in some cases superior, to its architectural effect when new; and this particular sort of value, once gone, is gone for ever; no one can anticipate time and forestall this interest for the new intruder. Is not the moral from this, then, rather to let an old building alone so long as it is safe? Better to leave its mouldering cornices and weather-stained walls to tell their own history, and to grow old with the dignity and interests of the past investing them, than make them give place to a fallacious attempt to reinstate their original condition. In many cases, however, the face of an old church, say, has been allowed gradually to fall into decay, while the interior and the substance of the walls are sound. The outside of the building must then be reinstated under good advice. The building, as a building, must be maintained for its purpose,—discussion is useless.

When we are concerned with old buildings in what may be generally admitted to be a bad style, or no style at all, the argument seems to be stronger in favour of removing them, if they cannot be maintained, and replacing them by something better. At all events, the mere replacing of old work by new in such a case is the last thing that should be done, for it is taking away the only chance for architectural dignity or effect from the design. An old building, in a bad and corrupt style, acquires in process of time its own picturesque effect from the softening down of bad detail or pronounced vulgarity of treatment, in the gradual process of decay, and becomes subject to that assimilating power which Nature exercises on all the objects which come under the play of her forces, and which tend more and more to become part of her own scenery and effect. The mere fact of age, too, imparts an interest to that which, when new, may have been commonplace enough. We look with a considerable, and perhaps rather melancholy, interest on that river-gate near the Charing-cross Station, though its age is not very great, now half-submerged beneath the level of the reclaimed land behind the Embankment, and standing there in mute protest against decay and abandonment. Should we at all care for the same feature if we saw it set up in one of the streets in fresh-hewn stone? Probably not. But we still have to consider the question whether, having arrived at the conclusion that a certain style of past architecture was altogether bad, and that we have got hold of and are practising a better one, we are as a matter of course wise in removing the old construction to replace it with what we believe to be better. And even here we think the utilitarian view is often the wrong one; speaking so far as the æsthetics of the matter are concerned, and leaving practical considerations on one side. And we are more desirous to suggest this side of the question, because there is a growing tendency to underrate and ignore it, and to be prepared to pull down anything and everything in favour of some such object as saving five minutes by a new route. We have said enough of the value of association in regard to the interest which old architectural works have for us; but there is also their interest as historical facts. It is absurd and narrow-minded to say that, because a style was bad, the fact of its having been practised is of no consequence, and may just as well be forgotten. It is just the history of the development of a style, or of its lapse again into an inferior and debased form, that is one of the most important elements in the formation of taste, and in leading us to discriminate between what is good and what is not. And the mere fact that such a style, bad or good, was for a certain period practised and admired by a number of men, as

by the society of the period in general, gives it an importance and an interest which no artistic consideration can entirely obliterate. However, it appears to us, in our days of more enlightened criticism, there was a period when a form of architecture which we now scout as tawdry, or weak, or affected, was the *ne plus ultra* of artistic good taste in the eyes of men better and wiser perhaps in some other things than those who now decry and despise their taste. This is an important fact to be remembered, and is likely to be remembered by those who have most education and most capability of judging between the inherent and the associated value of architectural or artistic monuments. The present custodian of Westminster Abbey, who has evinced in many ways his enlightened interest in the noble Mediæval building committed to his care, has shown in his treatise on the history of the building, a true appreciation of the value of the curious and oddly-associated crowd of monuments which line its walls. No doubt they do destroy the purely architectural character and completeness of the building; but they have their own value as testimonies of the taste which at one period prevailed; as the Dean puts it (we quote from memory), they are the records of the artistic spirit of their period, awkwardly struggling into existence. Some little time ago a memorial was addressed from the Institute of Architects to the Board of Works, praying them to preserve intact the space to the west of the Mansion House, adjoining Queen Victoria-street, so as not to intercept or spoil the view of a building of so much interest in regard to architectural and metropolitan history. The memorial (as witnesseth the large block of offices by which the Mansion House is now faced or flanked) was unsuccessful, and was even regarded as frivolous and absurd by some of the body to whom it was addressed. Considering the great value of the site in question as building land it was perhaps scarcely possible that it would be sacrificed for such an object. But though most of us may think, and some of us with justice, that we could put something better in place of the Mansion House now, the memorialists were perfectly right and to be commended in the feeling which led to their appeal. This is a subject which ought to be put in its true light, and jealously watched over; for the tendency to mere utilitarianism in building is becoming so marked that there is danger of the architectural history of the metropolis being speedily wiped out, or at least many of its most interesting chapters, in the thoughtless search after short routes and high rents at any sacrifice. And what is thus going on here may be expected to go on, though in a less marked degree, in other places. We have surely not come yet to such a pitch of prosaic dulness, that we are to prefer the destruction of buildings which, however defective, are landmarks of our architectural and social history, to the slightest deficiency in some real or fancied requirement of modern convenience or modern hurry.

THE NEW INDIA MUSEUM, SOUTH KENSINGTON.

WE congratulate the Director of the India Museum, and all those interested in the produce and the welfare of our Indian empire, on the safe establishment of a most valuable collection in its new home. Our readers may remember the account which we gave of so much of the display as was visible in its original locality. It has undergone chance and change since then, including the risks of packing and unpacking, to say nothing of the lengthened abode of many objects in darkness and obscurity. It is now well housed, well lighted, accessible to the public, and with room to expand.

With all our experience of exhibitions, there is something special in the Indian Museum. A certain element of competition, not to say of advertisement, to which the great displays of London, Paris, Vienna, and other cities, owed, no doubt, much of their brilliancy, is here conspicuous by its absence. It is replaced, however, and that to the great relief of the noncommercial visitors, by a certain statesmanlike air. It is, perhaps, difficult to convey in words the exact idea that we have in view; but the impression formed by the India collection is rather that it has been the result of a set purpose to foster and develope the resources of a mighty empire, than that it is the outcome of a phase of actual civilisation. And, in point of fact, we apprehend that this idea very justly characterises this most interesting display.

A great charm of the collection is its universality. Whatever be the hobby of the visitor, he can have a chance of giving it a canter. Whatever he desires to learn as to Indian produce, art, manners, craft, scenery, he has a good chance of discovery. From mineralogy to ethnology every department of study is illustrated; and one or two are illustrated in a manner which is to us, we candidly own, as novel as it is interesting and suggestive.

In the absence, as yet, of any catalogue, we will ask our readers to step round with us in fancy, as we endeavour to recal some of the salient features of the two long galleries, which are those of the eastern side of the once perpetual International Exhibition. The raw products of the soil, although not first in the gallery, may be naturally so regarded. Here we have, first, the great determinant of human concentration,—at least, in the West,—coal. Cubes of this precious mineral, some 14 in. square, indicate one source of Indian wealth. Comparing the number of specimens with the vast area of the enormous peninsula, we may conclude that, in this department of mineral study, we are but at the commencement of discovery.

Parallel to the case containing specimens of coal, is a collection of samples of building stone. Here, again, may the last remark be repeated. From the peaks of the loftiest mountains in the world, along the varied ranges, and exhaustive series of geological formations, that intervene between the Himalaya range and Cape Cormorin and Point de Galle, we may expect to find almost every known, and possibly many unknown, species of building stone. The collection exhibited consists of remarkably compact, durable specimens, but they are nearly all marked by a sombre hue. We see nothing like the glitter of some of our own limestones and sandstones,—no stone approaching in beauty our own Bramley Fall; or the material of those mighty blocks which, in prehistoric times were brought from unknown quarries to rear the mystic temples of Avebury. We find nothing so fine and workable as Caen stone or even Portland. But from a very fine-grained and solid granite, down to a red conglomerate that looks almost like a faggoted mass of scrap iron, there is such a variety of the grey, brown, and dusky stones that appear to have been selected by Indian taste, that we cannot doubt that almost any quality desired might be found by diligent search. We did not observe any samples of slate. But either here or in other parts of the museum are to be found malachite, quartz, jade, alabaster, basalt, serpentine, dark-coloured marbles, soapstone, and so many earths and gems that we cannot doubt that the list of building stones may be almost indefinitely increased.

Then come the minerals that form the rough materials for industrial processes. There is Kaolin and potter's clay,—white, yellow, brown,—of almost every hue. There are limestones for cement. There are numerous specimens of metalliferous sand, red hæmatite iron ore, magnetic iron ore, and iron sand of varied degrees of fineness. Gold appears, not in nuggets, but in grains, scales, and little moss-like lumps, in gold-sand and gold-washings, and in little rude buttons which we take to be the result of native fusing. Silver is not so conspicuous, although there are argentiferous ores of other metals. Sulphur, graphite, and copper ore, as well as malachite, are exhibited. There is tinstone as well as tin ore, and metallic tin, lead, galena, and antimony. There are various specimens of pure felspar. The geologic rocks range from the boldest to the minutest specimens. Quartz occurs in groups of crystal, and in striated crystals. There are little heaps of "gem-sand," and precious stones in the rough; corundum, garnet, carbuncle, and oriental turquoise. Small specimens of the latter are set on little straws or reeds for carriage. The materials for enamel have a case to themselves. Near are those precious to the painter,—lazulite, ultra-marine, remarkably pure Prussian blue, and cinnabar. Stones for personal ornament form a group apart. Crystals, garnets, cat's-eyes, chalcedonies, cut in facets or dim *en cabochon*, are shown, both alone and set in native gold, with more display of wealth than of taste, but not without a certain Oriental magnificence.

Among the minerals which form the materials for manufactures are realgar and orpiment, which are the red and yellow sulphuret of arsenic; and a curious series of specimens of salt. These range from a cube of rock salt, some 2 in. by 1 in., looking almost like a piece of rock crystal, to brown, black, and red salts. A specimen of the latter consists of little sponge-like bodies, that give the idea of coarse moist sugar rather than of salt.

The products of the vegetable kingdom are illustrated in greater detail than are the sources of the mineral wealth of India. Although a good catalogue is here a great desideratum, and although a complete system of printed labels is also a necessity to be met in the future, yet the combination of information that may be acquired from the drawings, photographs, and actual specimens of trees, plants, woods, seeds, and fruits is of very great value. As far as the collection of seeds, and materials for *materia medica*, or for industrial processes, is concerned, there is perhaps but little left to be wished. With regard to the very important question of timber and the finer woods applicable to the purposes of building, of furniture, and of all kinds of carved and enriched woodwork, we hope to see specimens of the various woods, in balks, blocks, or planks, added to those well-arranged sections which are displayed in the vertical cases. The connexion, too, between the raw material and the artificer's work which is applied to it, should be so pointed out that our mechanics and art workmen may at once understand it. No doubt it may be the fault of not being able to give more than a few hours to an inspection; but the identification of the trees which produce the beautiful black-wood, and the sweet-scented sandal-wood, in which such elaborate carving is displayed in another part of the gallery, did not present itself to the mind as clearly as we could have wished.

There is ample, however, to show how exhaustless are the vegetable resources of India. In the reviving taste for the application of true art and elaborate skill to the construction of domestic furniture, nothing can be more opportune than a knowledge of the rich variety of coloured, mottled, and pencilled woods which the Indian forests offer to the cabinet-maker. For these we refer to the vertical cases; calling attention to the silver, fir-like, delicacy of the *acacia*, the satin surface of the *citrus*, the full black colour of the *dalbergia*, the curious outlines, like those of islands on a chart, traced on the sections of the *antidesma*, and the beautiful contrasts to be observed between the clear simple tints of both the light and the dark coloured woods, and the varied touch with which striated and ocellated surfaces mock the pencilling of the wing of the partridge and the dotted plumage of some of the rarer *phasianidæ*.

One application of timber, namely, that to boat-building, is illustrated by numerous models of various forms; from the ark-like abode of those river market-boats which seem to form the permanent home of their owners, and rise in stories from the water, to the long narrow canoes, one of which is gilded, and one copied in ivory, in which, under the name of a war-vessel, a dignified personage, seated under an umbrella on the stern, is propelled by thirty rowers. The quaint and elaborate carving of these ornaments, which in our waters appear only under the somewhat rude form of figure-heads, is often worthy of attentive examination. The sails, moreover, of these boats illustrate another branch of vegetable produce, that of fibre used in arts and manufactures.

The seeds and fruits of forest trees, and other plants, are well represented. Of these,—the greatest novelty to the English visitor,—is the male cone of the *Cycas pectinata*, an oblong body some 15 in. long, which might be taken for a rough sponge, or a dark-coloured fungus. The cones of the *Deodara excelsa*, and of various species of cedars and pines, will also be regarded with interest. The great body of seeds, however, will be found arranged under either agricultural produce; vegetable products, used in arts, manufactures, or *materia medica*; or spices and condiments.

The highly important class of vegetable gums and resins contains numerous and beautiful specimens. There are various kinds of *gutta-percha*, a material which, from its perfect pliability when treated with hot water, and from its hard solidity at lower temperatures, is invaluable for many of the most delicate processes of art. For the surgeon, and more especially for the dentist, it is invaluable. There is also the longer known, and scarcely less valuable, caoutchouc, the specimens of which might be instructively illustrated by the juxtaposition of a living plant.

Agricultural produce is illustrated, of course, in the first place, by the paddy, or rice-plant,—

the *Oryza sativa* of the botanist. Of the main forms of cereal on which large races of mankind depend for food, the rice is one of the very few which are found in a state of nature. This fact has led many to question whether wheat, rye, barley, and other seed-corn have not been gradually developed, by human care, out of wild grass. That such was not the case, we take to be positively proved by the permanence of these types. The barleycorn of the early Phœnician and Babylonian shekel is identically the same as the Troy grain of to-day. The specific gravity of wheat, attained by comparing certain literary *data* of the eleventh century of our era, is a fair average for to-day. Our own idea is, that wild wheat, wild barley, and the like, have offered so irresistible a temptation to the birds as to have been actually exterminated by these hungry and improvident consumers; and preserved only by human care. Paddy, on the other hand, being an aquatic plant, and thus having a better chance of sowing its own seed, still holds its own in a wild state, side by side with its cultivated condition. The ears of this precious food-plant resemble the small pearls strung on the Indian necklaces, not of course in form or in lustre, but in general effect.

Maize (*Zea Mays*) and Jowaree (*Sorghum vulgare*) are shown both in pod and panicle, and in seeds. The spike of the Bajra (*Penicillaria spicata*) resembles the club of our English bulrush. The sedge-like growth of the Raggi is a rare form for an edible, or rather food-producing, plant. An assortment of starches and meals, produced from various seeds, is appropriately added here.

Then comes an interesting group of edible cryptogamous plants.

Tea, both in the dirty little nuts which form the seed of the plant, and in every conceivable form of manufactured leaf, occupies a considerable space. Coffee is no less fully illustrated. Almonds, Cashew nuts, Shah bulloot or edible acorns, pepper, long pepper, capsicums, cloves, opium, narcotic hemp juice, betel or areca nut, and the yet more universally consumed narcotic, tobacco (in the crop of which the present year witnesses so great a deficiency), bring us to the close of a series of exhibits which will receive an unusual degree of gratified attention.

The next group of vegetable products comprises fibres, used in, or likely to be useful for, industrial and manufacturing purposes. It is impossible to look at these numerous exhibits, drawn from so many distinct families of the vegetable kingdom, without coming to the conclusion that the natural home of the paper-maker is in the East,—in India, no doubt, as well as in Japan,—and that we may expect that the markets of the world will, sooner or later, be supplied with Indian, Chinese, and Japanese papers. The unrivalled materials with which nature has enriched the Japanese Islands enables the inhabitants, at the present hour, to produce papers, varying from the delicate film used for pocket handkerchiefs, to the thick water-proof material used for tarpaulins, over-coats, and roofing purposes, which no European maker can attempt to come near. Whatever texture or thickness is required can be, and actually is, produced in Japan. The number of different kinds of paper is extraordinary, and the customs and etiquette of the country affect each to a specific use. In the course of time, European luxury will refuse to be denied these elegant varieties of paper. The question will have to be decided whether it is better to export our manufacturers to the countries where the materials are found, or to import the materials to this country. We believe that the former will be found by far the most lucrative course, especially having regard to temperature during manufacture, and to the fresh condition of the plant which furnishes the pulp. We therefore venture to suggest to those who take so much interest in developing the extraordinary native wealth of India, to pay especial attention to the subject of these vegetable fibres and vegetable pulps, which may be available for this most important manufacture.

The department of *materia medica*, or vegetable substances used as medicine, is as fully illustrated as either of those which we have mentioned. First here must be mentioned (with gratitude and admiration for the indomitable courage and perseverance of the gentleman to whom India is indebted for the most precious drug that is at the command of the physician, the magical quinine) the very fine specimens of cinchona-bark which the Indian Government may well be proud to exhibit. The plant is of rapid growth, but the bark is of a size such as would be attained by the bark of the oak in about eight or ten years. Large areas of country are now planted with this tree of life. There can be little doubt that India will hereafter supply the world with quinine, and we may look forward to a great reduction in the price of a drug which, though worth its weight in gold if not otherwise to be attained, is certainly out of the reach of many to whom it might mean health, or even life, at its present price of three times its weight in silver. It is highly satisfactory to see the healthy condition of the samples of bark. They are exhibited in two states,—first, as stripped from the tree, and secondly, as "mossed," that is, cleansed from all parasitic growth of moss or lichen. It will be an interesting question for the physiologist to ascertain whether lichens growing on the *cinchona* possess any special medicinal properties.

After what was formerly called Jesuits' bark, or the material from which quinine is extracted, come chamomile; arnica, that unrivalled heal-all in sprains, bruises, or injuries to the skin; santonar, both branch and seed; arctostaphylos, or bears-grapes; diospyros, under the native name of "gab," and in the form of a rather dirty nut; digitalis, or foxglove; belladonna; camphor; sal resin, from the *Shorea robusta*; piney resin; rhubarb, the rarest of drugs to purchase in its purest state (there is but one shop in London where it should be procured: in its ordinary qualities it is mischievous), and cassia.

We have exhausted the space at our command without having introduced our readers to more than a fourth of the area occupied by the collections. The mineral and botanical specimens are arranged in the southern half of the ground floor of the museum, which occupies, as most of us are aware, the eastern gallery of the building in connexion with the Albert Hall. We have entered more fully into the subject than we otherwise might have done,—first, because of its permanent interest; and the importance to the grandeur and dignity of our empire of this vast outlying kingdom, or rather continent of kingdoms; and, secondly, because, in the absence of a catalogue, a somewhat detailed introduction may be of material service to those of our readers who visit, as we strongly recommend them to do, the spot. While we have thus thought it not unsuitable to dwell on some subjects which do not often fill our pages, such as the elements of *materia medica*, it will be borne in mind that the great questions of building materials, and of materials for various art industries of importance, are admirably illustrated, as we have endeavoured to point out, in the museum. As to the remaining contents of the galleries, we hope to have another opportunity of bringing them before our readers. They comprise a very beautiful and well-arranged illustration of the Indian fauna,—that is to say, of the birds, beasts, reptiles, fishes, and insects of India; a gallery of sculptures, bronzes, and similar objects, some of which have an interest, as we hope to show, altogether novel; and a further display of these textile manufactures, metal manufactures, and exquisite works in wood, jade, blackwood, sandal-wood, filigree, and jeweller's work, which many of our readers have climbed to the garrets of the Foreign Office to admire. There is also a very good collection of arms, the distribution of which, no less than the peculiar character of one group of sculpture, throws a very distinct light on an ethnological question of the deepest interest. The museum is too much to be exhausted by the visitor in a single visit, or by the art critic in a single report.

FREDERICK WALKER, A.R.A.

ALL who are interested in English art will have heard, with sincere regret, of the death, at a very early age, of one of our few really poetic and original artists. Mr. Frederick Walker was educated, if we mistake not, as an architect, and after giving up the set-square, first came before the public as a book-illustrator. He was elected an Associate of the Royal Academy in 1871.

Mr. Walker was one of the most gifted representatives of that school of what may be called idyllic painting, which has recently been developed in England, of which the late G. Mason was a shining light, attaining, as he did, a perfect balance of feeling and tone, a harmony between the figures and the landscape, more complete than any of his successors have reached, though in a very quiet and undemonstrative manner. Mr. Walker's style was not so perfectly balanced as Mason's, nor so delicate and harmonious in colour, but in intensity and variety of feeling he surpassed the elder artist, and in every way may be said to have been a painter of more power, and one who appealed, in spite of certain undeniable defects of style, to a deeper feeling than is generally touched in contemporary English painting. The artist showed early indications of his leaning towards the portrayal, in his figures, of the more touching and dignified side of humble life, commenced at first apparently as a study, and continued and enlarged as a subject with which his heart was in sympathy. One of the works which first attracted general attention was his painting of London boys of the lower order bathing in some suburban canal, a picture which, while it gave opportunity for exhibiting his knowledge of figure-drawing in a very realistic form, gave evidence, too, of a new way of regarding and translating the tones of landscape, a way which, indeed, was looked upon with more surprise than satisfaction by those who first took notice of it. But this strongly-marked idiosyncrasy of colouring, in which nature seemed jaundiced, was toned down eventually into a style remarkable for what may be termed a quiet brightness in the representation of local colour and light in foreground and middle distance. Nowhere has this power been better shown than in his latest small work in this year's Academy. But landscape with Walker was always subordinate in interest to the figures for which it formed the setting, and in which he achieved, what is very seldom achieved in painting, the combination of moral purpose with artistic feeling. Perhaps the work which most successfully illustrates this is the one exhibited three or four years back at the Academy, with the title "Man goeth forth to his Work and to his Labour until the Evening"; on the whole, certainly, the best balanced of all his works, and that which gives the truest idea of the peculiar bent of his genius. In this the scene, with its melancholy and sober tones, was in complete harmony with the almost grand pathos of the wearied figure following the plough, thrown forward and half-leaning on it for support. The blending of art and *morale* has seldom been more complete; it was scarcely possible to say which kind of interest predominated. The later work, the "Harbour of Refuge," which made such a sensation, was more intense in feeling, but not so well balanced, and open to question in regard to some technicalities. The artist's genius was shown very remarkably, too, in some of his small water-colour drawings from time to time at the gallery in Pall Mall East. Most people who visited the last winter exhibition of sketches and studies there will recollect the little interior with two girls at a window, under the title of "The Rainbow": few designs more perfect in execution and feeling could be seen; the figures were so characteristic in their whole attitude and expression that the spectator could almost read their thoughts. The loss of a painter capable of such genuine poetic feeling will leave a sad gap in our already too prosaic exhibitions, and many will think with regret that "What is there of Walker's?" can no longer be one of the first questions in relation to the annual Academy collection.

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

PRESENTATION OF THE ROYAL GOLD MEDAL.

THE closing general meeting of the session was held last Monday evening, the 7th inst., under the presidency of Sir Gilbert Scott, when the following gentlemen were elected:—Messrs. T. Garlick and John Gibson (fellows), and Mr. E. George Jones (associate).

Mr. Cockerell intimated that the library of the Institute would remain open until the end of August.

Sir Gilbert Scott, in presenting the Royal Gold Medal of 1875, said that, considering the circumstances of the case, it was unanimously agreed at the Institute in favour of recommending Mr. Edmund Sharpe as the recipient of the medal for the year, and her Majesty had confirmed that recommendation. Referring to the works published by Mr. Sharpe, the President went on to say that they were greatly indebted to the elder Pugin for his works in connexion with architecture, but he thought that none of these equalled the works of their valued friend, Mr. Edmund Sharpe, especially with regard to the magnificent abbeys of the country.

The abbeys were once the pride and delight, as they were once the shame, of the country Beautiful as these abbeys were, the neglect which they had received of late years had been one of the great disgraces to art and art feeling in England. Mr. Sharpe had done more than any one to redeem this state of things, and had added much to the interest of this study by his publications; and his lectures, which were of a very graphic character, were calculated greatly to maintain the interests of the profession. To this gentleman, too, they were also under an obligation for having personally conducted, for the last two or three years, a large number of architectural students through different towns, especially in France, which was rich in architectural remains. The president was glad to state that this year Mr. Sharpe had promised to again superintend another autumnal tour.

Mr. Edmund Sharpe, after receiving the Gold Medal, said he believed that in order duly to appreciate the honour which the medal which had just been presented to him conferred upon the person who received it, it was necessary that the recipient should either be an architect in professional practice, or one who had been so at some earlier period of his life. For to such a one this testimonial, which, although the gift of the Queen, was the award of the representative body of the whole of his professional brethren, came with a fuller significance, and a higher value than it possibly could to any one else. For his own part, he could assure them that on this account he looked upon it as the highest possible honour that he could ever wish for, or hope to attain. In his own case, its value was enhanced by a consideration, the force of which they would readily understand. The works, the publication of which had obtained for him this honour, were not works of general interest; they had been published for the use and the instruction of the architect alone; they were, in fact, what the publishing trade called "class-books." Their circulation was consequently very limited, much more so, perhaps, than those who had not tried the experiment might be inclined to suppose. The publication of such works was, in fact, it must be confessed, a somewhat expensive luxury; and the sole reward that those who indulged in this pursuit could expect was the satisfaction that was derived from the belief that their publication was of use and value to those for whom they were intended. To receive, then, so satisfactory a confirmation of this belief as that which was conveyed by this testimonial was, he need scarcely repeat, the highest possible reward that he could receive for any past efforts of his in this direction; and in very sincerely thanking the Council of the Institute for the choice they had made this year of the recipient of the medal which her Majesty was graciously pleased annually to bestow, and in thanking those present for their confirmation of that choice, and their worthy and distinguished president for the flattering terms with which he had accompanied the presentation of the medal, he could assure them that, greatly as he appreciated this honour, he should look upon it quite as much as an encouragement to renewed efforts as the reward of those of which it was the gratifying expression of their approval.

Sir Gilbert Scott said that if they would allow him he would like to add two or three more words to what he had already stated, with reference to ruined buildings, especially of an ancient character. Ruins were falling into decay winter by winter, and in a few years they would become unrecognisable; but it was to such ruins as these, he was glad to state, that Mr. Sharpe directed attention, and thus prevented them being lost to future generations. In his (the President's) short memory with regard to such things, he had known many instances in which, in former years, he had made sketches of ruins, but when he revisited the ruins, after some considerable time had elapsed, he had found that they were almost unintelligible. In this view he was supported by Mr. Ruskin. He thought that they were under great obligations to all those who took up the matter of saving these ruins from perishing in the manner Mr. Sharpe had done. He wished that this gentleman's example might incite members of the architectural profession to institute a society which would, from time to time, register and chronicle, one by one, the best and more obscure of the remains which were mouldering away, so that in due time they might satisfy their minds that the majority of the admirable works of ancient Greece and Rome, which were beautiful in their details, might be handed down in some shape or other to future generations.

Mr. Christian concurred in the remarks of the president, and instanced Furness Abbey, which he found was possessed of many beautiful details. Twenty-five years later he again visited it, and discovered that it had fallen most distressingly into decay, which might have been prevented had proper means been taken to preserve it.

Mr. T. H. Wyatt said that probably they were not all aware that the death had recently occurred of Mr. Welby Pugin, who had lately been before them in a somewhat painful position.

Sir Gilbert Scott stated that the Council had heard of Mr. Pugin's death with regret.

The distribution of the Institute prizes of 1874–75 then took place. The names of the respective recipients have already appeared in the *Builder*, but in regard to the architectural examination, Mr. J. F. Hennessey stands first on the list, and is consequently entitled to hold the studentship of the Institute for three years. In addition to this Mr. Hennessey was awarded the Ashpitel Prize.

Mr. Eastlake (secretary) then read a letter from Mr. Disraeli, in which the Prime Minister curtly stated that he had received the memorial of the President and Council of the Royal Institute of British Architects on the subject of the excavations at Ephesus.

Mr. Hayward referred to the death of Mr. Joseph James, a former Fellow of this Institute, who died last month at the age of forty-seven, having been a practising architect for twenty-five years, and author of some works on the Gothic Revival.

The discussion of Mr. Roger Smith's paper on "New Materials and Recent Inventions connected with Building" (which has already been reported in the *Builder*), was then resumed, and is reported under another heading.

NEW MATERIALS AND RECENT INVENTIONS.

MR. AITCHISON, in opening the discussion, said that the paper by Mr. Smith, read at the Institute of Architects, embraced nearly the whole of the discoveries of modern invention; but he had omitted to refer to mosaic pavement of glass, which had been employed at the South Kensington Museum. He was rather surprised to find, from a paper recently read at the Society of Arts, that the invention of toughened glass, which appeared to have slumbered since the early part of the Christian era, had been rediscovered. With regard to concrete walls, they were apt to split perpendicularly, and great fissures were thereby caused; they also shrank very much. In respect to selenitic mortar, he counselled its prudent use, for mortar was a material that dried very rapidly.

Mr. Redgrave stated, at the last meeting it was affirmed that selenitic mortar was the invention of General Scott; but other people had a different view of the matter. This mixture, it was stated, consisted of the ordinary ingredients of mortar, viz., lime and sand, though the sand was in larger proportions than usual, with the addition of a small quantity of gypsum (sulphate of lime) very intimately mixed with the lime. If, however, the invention was subsequently modified, he thought that it was only due to General Scott that some explanation should be given.

Professor Kerr (who had read a paper on the subject of "Artificial Stones," some time ago, and who in his remarks at the time had referred to this mortar) stated, in reply, that he did not undertake the responsibility of the matter, for at the time he only pointed out the assertion of several others that an idea which then prevailed was that General Scott's invention was almost identical in science with Mr. Westmacott's invention. He would be very sorry to take away from General Scott any credit of his invention.

Mr. Edmeston said that whenever he had used concrete he had carefully seen that a quantity of sand was mixed with it.

Mr. Morris referred to the Imperial Fire Office, in Pall-mall, which he said, was a concrete building, so that from this proper *data* could be gathered as to the properties of concrete. With regard to iron beams, he did not think that fair play had been given to Phillips's girders. In respect to toughened glass, it had been said there recently had come up a new invention, and he thought that if anything could be done to make glass bear greater pressure, without impairing its brilliancy, a very important point would be gained.

Mr. Paine had heard it stated that in the case of many concrete walls water ran through them like as through a sieve; but this was not the case at the Manchester Waterworks. He had seen enormous breakwaters made entirely of concrete, and engineers would not dream of using a material in which there was a possibility of it splitting perpendicularly, and thereby causing a fissure to be made.

Mr. Cockerell asked how long the concrete had been used in connexion with the Manchester Waterworks.

Mr. Paine replied that it had been in use about five years.

Mr. MacVicar Anderson did not think it was possible to make concrete withstand water. The principal point was to have the concrete thoroughly mixed, and if this were not done, it would not turn out satisfactorily. For his own part he preferred a good brick wall.

Mr. Eastlake apologised for the absence of Mr. Roger Smith, who had been called away from town on pressing business.

Professor Kerr, at the wish of the President, then replied to the various questions raised in Mr. Smith's paper. He commenced by saying that he hoped the Council of the Institute would take some notice of the suggestion which had been made, so that they might have an annual report of any inventions of new materials in connexion with building purposes, so as to enable the members to show that they really took some interest in the matter. The discussion on concrete had displayed a good deal of science. In whatever way they might make concrete, it was still an artificial stone. As all natural stone absorbed moisture, it followed that concrete must be very porous. He considered that it would be best to make a few experiments with regard to it. He thought that Mr. Smith was wrong in stating that building science had not made great progress in relation to the other departments of the profession. Mr. Smith had forgotten one thing, and that was in respect to architectural design as regarded contrivance of houses, churches, and public buildings of all kinds; and he thought they would be disposed to maintain that they had advanced considerably within the last twenty years; as, for instance, hospital construction. There were a great many points of the same kind in which the architects of England had, within the last twenty years, signally displayed the progress of inventions. But upon heating and ventilation, and in respect to the cure of smoky chimneys, they had not so much advanced. He really was inclined, however, to think that architects had done their share in relation to these matters to bring about better results in these petty, vexatious things. He did not think that architects ought to be charged for neglecting their duties in this direction. He ventured to say the houses were better formed than they used to be; they were better ventilated, and chimneys did not smoke so much; while drainage was improved. But the most important consideration in these matters was the rapid growth of fastidiousness. What was comfort a few years ago was the height of discomfort now. With regard to dwellings of the poor in the country, he advocated timber dwellings, which could be built for about 30*l.* or 40*l.* each, and would accommodate the working man with comfort.

THE LATE MR. E. WELBY PUGIN.

THE death has been announced of Mr. E. Welby Pugin, son of the late Augustus Welby Northmore Pugin, and grandson of Augustus Pugin; it took place at his residence in Victoria-street, Westminster, on Saturday evening last, June 5th. The cause was syncope of the heart. He had been very ill, partly through the injudicious use of chloral hydrate, a valuable but very dangerous medicine except in proper hands, but had so far recovered that he walked out on the day of his death and spent the greater part of the afternoon in a Turkish Bath. About eight o'clock in the evening he said to his confidential assistant that he felt tired and should go to bed. Very soon after he had entered his room a noise was heard, and in a very short time he had ceased to live. He died, as his father had done before him, at the age of 41.

Edward Welby Pugin was born March, 1834, and was educated at home under the care of his father, whose right-hand man he early became. Upon his father's death, in 1852, he undertook the entire management of his architectural business. At the age of seventeen years he was

thus placed in an arduous and trying position, which tested not only his abilities but his character. He stood the test, and his native energy was rapidly developed. He completed all his father's buildings, and soon cut out work for himself. From early in the morning until late at night, without relaxation, he worked at the drawing-board, and the great skill he displayed was the result of a long course of severe labour and intense application. He was lively in temperament, though subject to fits of depression, and appears to have had the faculty of attaching to him the people around him, even at those times when the outside public were least disposed to consider his conduct wise. When he first established himself in London he obtained a large amount of business, and working early and late, is said to have made 40,000*l.* in five years. He continued to execute a large amount of work, either in partnership with others or single-handed. The erection and establishment of the Granville Hotel proved, however, a disastrous speculation, and knocked down what had been before set up.

Seven or eight years ago Mr. Pugin entered into controversy with more energy than wisdom to claim for his distinguished father, erroneously (as we were able to show at the time) the title of architect of the Houses of Parliament; and since then he has been too often before the public in courts of law, both in London and Ramsgate. From what took place on one of these occasions, it is said by those about him, he never recovered. In giving evidence in the case of Hayes *v.* King, when, as his friends think, his bodily state was such that he scarcely knew what he was doing, his assertions brought upon him some observations from the Lord Chief Baron, Kelly, which continued greatly to affect him. In the conversation shortly before Mr. Pugin's death, to which we have referred, he had expressed his determination to give up law, and "go in again for hard work." Nearly the last words he uttered on that occasion sound now prophetical,—"On my tomb I should like written, 'Here lies a man of many miseries.'" He was buried at St. Augustine's Church, Ramsgate, on Thursday last, the 10th inst.

The following list, which has been put together with some pains, will serve to show the amount of work he executed:—

Ecclesiastical Buildings.

Cathedrals and churches, mostly Roman Catholic: — Churches at Peckham, Kingsland, Whitehaven, Workington, Hastings, Northampton, St. Vincent of Paul, Barrow-in-Furness, Great Harwood; Dadizeele, Belgium; Tower-hill, London; Croydon; the Augustinian, Dublin; Barton, Mont St. Marie, Leeds; Fleetwood-on-Wire, Kensington, Ratcliffe, Crosshaven, Rotherwas, Monkstown, Oldam, Glenfinnan, Dover; Holy Cross, Liverpool; Much Woolton; Westby, Liverpool; Margate (additions), Rugby, St. Marie's, Newcastle; Northampton Cathedral; Burton-le-Coggles Church, near Grantham; Queenstown Cathedral; the churches of Guernsey (additions); Stanbrook, Worcester; Preston; Eldon-street, Liverpool; Tasmania, Warwick, Barking, Ashford, Wrexham, Blackpool; St. Edward, Liverpool; Derby, Stourbridge, Batley, Shrewsbury; St. Marie, Euxton; Cleator; St. Goderich, Durham; Haddington, Birkdale, Dewsbury, Kingsdown; SS. Peter and Paul, Cork; Bootle Church and Schools; Nechell's-green Church and Schools, Birmingham; Rochferry Church and Schools, Birkenhead Church and Presbytery, Greengate Church and Schools; Cuba Church, West Indies; Gorton Church and Monastery, Sheerness Church and Presbytery, Huyton Church and Presbytery, Mayfield restorations, Leith Monastery, St. Joseph's Retreat, Highgate; St. Marie's Monastery, Kilburn; Tralee Convent, Glasweran Convent, Ravenshurst Convent, Oulton Convent; Nenagh Convent, Ireland; Handsworth Convent, Waterford Convent, Good Shepherd Convent, Liverpool; St. Gregory's College, Ramsgate; Oscott Chantry, Ushaw new Chapel and College, Danesfield Chapel, Aston Lady-chapel, Stafford Church and Schools, Belmont St. Michael's Church and Monastery, the Knill Chantry; St. Augustine's Monastery (additions), Ramsgate; Mount Vernon Convent and Schools, Liverpool; Sedgley Park Schools, Birmingham; Church and Schools, Hoxton-square, London; Bradford Schools and Presbytery; Challoner's Schools, Liverpool; St. Alban's Schools, Liverpool; Birchley Bilinge Schools, Salisbury Schools, Wooton Schools, Mount Carmel Schools, Liverpool; Newton School, Hammersmith Training College, Nottingham Training Schools, Maidstone Schools, Stretford Church Presbytery and Schools, Tranmere Schools, Warrington Schools, Woolwich Schools, Sandhurst Schools, Turnham-green Schools, Egremont, Trissington, and Cleator Moor Schools; Schofield Chantry, Hanwell Chapel, Bletchley Orphanage, Hellingsley Orphanage, Hanley Presbytery, Harwich Chapel, Edinburgh Church, the Lord Cemetery, Liverpool; and St. Helen's Cemetery.

Also the following buildings:—Chirk Castle, Tofts, Harrington House, Leamington; Château at St. Michel, Belgium; Burton Manor, Croston Hall, Scarisbrick Hall; Meanwood, near Leeds; The Chimes, Kilburn; Carlton Towers, Seel's Buildings, Liverpool; Burton Manor, Clapton Almshouses; the Granville Hotel, Ramsgate; Grafton Farmhouse, Monument erected at Nice in memory of the late Mrs. Lamb, Oswald Croft House; Garendon Hall, Leicester (additions); St. Marie's, Newcastle; and many others, both Ecclesiastical and Domestic.

VALUE OF LAND, CHANCERY-LANE AND HOLBORN.

ARRANGEMENTS having been made for widening the end of Chancery-lane next Holborn, the House Committee of St. Bartholomew's Hospital, to which important Institution the plot of land affected (on the west side of Chancery-lane) belongs, have relet the remainder of it for building on. The "Lane" will be widened to the extent of 20 ft. next Holborn, and for the piece of land thus thrown in, which is about 90 ft. long and 10 ft. wide at the farther end, the Hospital will receive 5,000*l.* from the Metropolitan Board of Works. The land remaining is divided into seven plots, and these have been let on lease for eighty years at the rent of a peppercorn for the first nine months, and after that time as follows:—Three plots in Holborn (each about 18 ft. frontage), at 170*l.* per annum each; three plots in Chancery-lane, about 18 ft. frontage, and of varied depth, at 95*l.* per annum, 125*l.*, and 190*l.* respectively, and the corner piece, extending (say) 28 ft. in each direction, at 250*l.* per annum. The whole piece, which may be called roughly 90 ft. square, will thus produce 1,170*l.* per annum, or at the rate of about 6,300*l.* per annum per acre.

A NEW MARINE WATERING PLACE.

SALTBURN-BY-THE-SEA is now to have a rival in Hardwick-by-the-Sea, for a large portion of the Hardwick Hall Estate, near Castle Eden, Durham, is to be converted into a marine watering-place. No less than 400 acres on the side nearest the sea are dedicated to the new town. Large hotels, marine residences, houses and shops, are to be erected, and a drive will be constructed along the sea coast. The Blackhall Rocks are contiguous, and the spot is pronounced salubrious and picturesque. The estimated cost of building alone is 200,000*l.*

The Hardwick Hall estate belongs to the trustees of the late Mr. Ayre, who will merely dispose of the ground to a company.

THE BRIXTON AND CLAPHAM BATHS.

AT the formal opening of the new baths in Shepherd's-lane, Brixton, last week, by Sir James Hogg, M.P., chairman of the Metropolitan Board of Works, Sir James observed that he believed such establishments did as much as anything could towards the elevation of the people. Without a clean and wholesome body, no man or woman could expect to have a clean and wholesome mind. People were therefore elevated in the social scale by means of baths. These baths would confer a benefit on thousands of people, which they could not possibly attain in their own homes.

Mr. J. M. Cottrell, the chairman of the directors, stated that the cost of the structure, including sinking the well, and providing the necessary machinery, would be about 14,000*l.* The swimming-bath is 150 ft. long by 60 ft. broad, and is said to be the largest in London. Its depth at the shallowest end is 3 ft. 6 in., and it gradually deepens to 8 ft. There are eighty-six boxes for bathers ranged on either side, and a spacious gallery runs round the entire building. The roof is supported on circular arches, and on each pier a statuette has been placed. The bath just opened is only part of the plan, which includes, in addition, a swimming-bath for ladies, as well as hot, shower, and Turkish baths. A skating rink has been provided in the grounds adjoining the building.

Only a short time before the hour appointed for the ceremony of opening the baths, the box of the pump in connexion with the artesian well for supplying the baths with water, unfortunately broke down, which caused a serious difficulty. Application was made to the Southwark and Vauxhall Water Company, in whose district the baths are situated, for a supply, but they were unable to furnish it. Ultimately, however, the Lambeth Water Company, who were next applied to, opened their mains, and with the assistance of Mr. Hewitt's steam fire-engine from Clapham, pumped a considerable quantity of water into the baths, so as to admit of Captain Boyton going through a series of performances. There were upwards of 4,000 persons present.

The baths were designed by Mr. F. H. Fowler, architect; and the contractor was Mr. Timewell, of Brixton.

THE SANITARY STATE OF WOLVERHAMPTON.

TWELVE months have nearly elapsed since Dr. Ballard, of the Local Government Board, presented to the head authorities a report which was anything but favourable respecting the sanitary state of Wolverhampton. At numerous council and committee meetings the questions put forward in the report were debated upon, and, after careful consideration, the Council, through the town clerk, have issued a long report in reply to Dr. Ballard's complaints, and in which, instead of advising attention to his requirement, they try what excuses can be found for not doing so.

THE SANITARY STATE OF TIVERTON.

A NUMBER of people have been killed off before their time, and a larger number made ill, through the want of proper sanitary arrangements in Tiverton and its neighbourhood; and the Urban Sanitary Authorities there are very angry because some of the relatives of those who have been killed are not entirely patient under the loss. We congratulate the editor of the *Tiverton Gazette* on having incurred the displeasure of the authorities, and we advise the Local Government Board to look into the matter at once.

THE LAST NEW DULWICH COLLEGE SCHEME.

PROPOSED NEW SCHOOLS AND BUILDINGS.

WITHIN the last two or three years several schemes have been proposed by the late Endowed School Commissioners and others for the future management of Dulwich College and the estates belonging to it, but their unpopularity, amongst other causes, led to their withdrawal. Another scheme issued by the Charity Commissioners, and which has received the sanction of the Committee of Council on Education, is now before the public, and it already appears that it is likely to meet with as strong an opposition as its predecessors. Should the scheme be ultimately adopted it will necessitate the erection of no less than five new schools in the several parishes of Camberwell; St. Luke's, Middlesex; St. Botolph's, Bishopsgate; and St. Saviour's, Southwark; and also the erection of a fives-court, and the fencing of the grounds around Dulwich College, at an outlay of 5,000*l.* In order to erect and establish the proposed new schools in the several above-named parishes the estate will be charged with the sum of 90,000*l.*, the scheme providing that 15,000*l.* shall be paid out of the college estates for the establishment and endowment of a boys' school at Camberwell; 10,000*l.* for a girls' school at Camberwell; 50,000*l.* for two schools in St. Luke's, Middlesex, and St. Botolph's, Bishopsgate, respectively; and 15,000*l.* for a school in St. Saviour's, Southwark. There is also to be a school of art, in connexion with the Picture Gallery at Dulwich, with an endowment of such balance as shall remain out of the annual income of the Picture Gallery Endowment Fund, when the expenses of management of the gallery and the maintenance of the pictures shall have been defrayed. The present upper school at Dulwich College is to continue, and its endowment is to consist of the

new college buildings, gardens, playgrounds, and cricket-field, but the lower school is to be closed. The almshouses at Dulwich are also to be continued and maintained at an annual expenditure of 1,500*l.*

The scheme is causing much agitation amongst the several parties interested. Amongst those who object to the scheme it is urged that under it the college will lose its position and dignity, and that the estate is to be practically taken from it in order to found schools in St. Luke's and other districts to an extent never contemplated by the founder; whilst, on the other hand, the northern parishes (St. Luke's and St. Botolph's) oppose the scheme, on the ground that it does not give them enough. They contend that under Alleyn's bequest they are entitled to a moiety of the college estates, and they therefore claim 100,000*l.* to build a college in the north part of London, and in addition to this sum one-half of the future income of the estate. Dr. Webster, an old inhabitant of Dulwich, stigmatises this claim as "monstrous," and endeavours to prove that Alleyn bequeathed the greater part of his income to the wardens and fellows of Dulwich College. The Endowments Committee of the London School Board have also induced the Board to oppose the scheme, on the ground that it does not provide for the higher education of scholars in elementary schools, and the advancement of meritorious children amongst the poorer classes.

IMPORTANT DECISION IN A BUILDING CASE.

PREES *v.* MORGAN AND JONES.

THIS was a claim tried at the Swansea County Court for 25*l.*, the amount expended in rebuilding a shed in Pontardulais which had fallen down. The case was heard at the last court, and the site of the building was inspected by the Judge, who took time to consider his judgment.

His Honour, in delivering judgment, said:—The plaintiff sues for damages arising from the alleged unskilful manner in which the roof was put on a certain building under a verbal agreement between him and the defendants, and in consequence of such want of skill the roof, being tiled, fell in. The plaintiff was to supply the woodwork, and the defendants were to fix on the roof. The agreement was made on the 14th of September, 1874, and the sum to be chargedwas apparently very small. The charge was first proposed to be 2*l.* 12*s.*; the defendant offered 2*l.*, and finally 2*l.* 7*s.* was charged. The span of the building was 16 ft. 9 in., and the length 45 ft. The roof put on was one of the most simple construction. It was a span roof, tied to the couple blades of the rafters. The sole questions are,—Whether or not the fastenings were sufficient, and such as experienced and skilful persons would regard as sufficient. After going very fully into the particulars, the Judge concluded by saying,—What was done was not an unusual mode to fasten collar-beams, though I think to be condemned. It was faulty, but this did not excuse the plaintiff from ascertaining this before he put on the tiles. Judgment for the defendants.

SCHOOL BUILDING NEWS.

Neath.—The new buildings at Ty Segur, near Neath, for the County Reformatory Schools, have been opened. The premises are L-shaped in plan, the longer wing containing the schoolrooms, dormitories, dining-room, master's office, &c., and the smaller one the kitchen, &c., with the head master's private rooms. The main elevation is in two stories, with a central block, to which something of a tower-like appearance is given by the addition of a third story, containing an isolated sick-room and nurse's room. The materials are the local Pennant stone from the neighbouring quarries for the walling, with dressings of hard black Staffordshire brick, Bath stone being sparingly introduced into the central doorway, and some of the chimneys, &c. The roofs are covered with green slate from Whitland Abbey, with red ridge cresting from the Maidenhead Tile works. The walls on the south and west aspects are hollow, consisting of an 18 in. stone outer wall, and a 4½ in. brick lining, with a 3-in. space between the two, so as to exclude damp. The work has been executed by Mr. John Thomas, of Neath, Mr. Thomas Hancock acting as clerk of the works, under the supervision of the architect, Mr. J. Bacon Fowler. The contract for the main building was 2,750*l.*; for the outbuildings, &c., a second contract was taken at 495*l.*, the laying out of the grounds remaining for the boys to complete as part of their school labours.

Curry Rivel.—The foundation-stone of the new schools, which are about to be built here by the voluntary contributions of the landowners, parishioners, and others, has been laid. The schools are to be built of white lias, with Ham stone dressing and blue bands, from the designs of Mr. J. M. Allen, architect, of Crewkerne, and they will be of the following dimensions:—Class-room, 18 ft. by 14 ft.; mixed room, 45 ft. 6 in. by 18 ft.; infants' room, 35 ft. by 18 ft.; with all necessary offices, and a spacious play-ground. The work has been entrusted to Mr. Alfred Webb, of Curry Rivel, the contract being for 1,000*l.*

Whitchurch.—The foundation-stones of a new Primitive Methodist Sunday School have been laid here. The site is in the rear of the chapel, which was built about a dozen years ago, and the building, which will be a plain brick structure, is intended to accommodate about 200 persons. The cost is estimated to be a little over 300*l.* The builders are Messrs. Powell & Co., of Whitchurch and Prees.

Coventry. — The foundation-stones of St. Osburg's new Roman Catholic schools, in Hill-street, Coventry, have been laid. The schools, which are intended to accommodate 700 children, will be a handsome building of red brick, with blue brick bands and white stone dressings. The amount of the contract is 2,160*l.*, and the work is being executed by Messrs. Hallam & Co., builders, Palace yard, from plans prepared by Mr. T. P. Donnelly, architect, Hertford-street.

Sherborne. — The school, styled Foster's School, just erected at Sherborne, has been opened. Several endowments having been amalgamated with that of Richard Foster, it was decided to erect a second-grade school for the commercial inhabitants. Messrs. Slater & Carpenter, architects, of London, were instructed to prepare plans, which, having been approved, contracts were invited, and the tender of Mr. Thomas Farrall, builder, &c., of this town, accepted at about 1,200*l.* The entrance is in Hound-street, opposite the door on the western side of the school; on opening the door is the hall, and to the south the large schoolroom, 60 ft. by 20 ft., with open timber roof, two fireplaces, with Portland stone mantelpieces and Hamstone fenders. The style of architecture is Gothic.

Wrotham.—The new Borough Green Schools, which have been erected for some time past, were opened on the 5th ult. by the Rev. Canon Lane, rector of Wrotham. The building, which has a substantial and neat appearance, was erected by Mr. Tomlyn, of Wrotham; the architect being Mr. Wheeler, of Tunbridge Wells.

Crofton (*Hants*).—New National Schools, for 150 children, have just been completed here, on a site in the Gosport-road, one acre in extent, the gift of Mr. F. Delmé, the lord of the manor. The buildings comprise a schoolroom, 40 ft. by 17 ft.; classroom, 18 ft. by 15 ft.; and an infants' schoolroom, 30 ft. by 18 ft. There is a teachers' residence attached. All are built of Fareham red bricks (hollow walls), with white brick arches and strings. Open roofs, boarded, felted, and slated. The interior woodwork and fittings are stained and varnished. The schools were formally opened on the 31st ult., by Bishop M'Dougall. The architect is Mr. T. Goodchild, London; and the builder, Mr. G. Barnes, of Portsea.

Wellington.—New parochial schools are about to be erected in this town from the designs of Messrs. Hay & Oliver, of London and Bath.

Ardwick (*Manchester*).—The memorial-stone of the Ardwick School was laid on the 15th ult., by the Rev. Dr. M'Kerrow. The building, with which considerable progress has already been made, is situated at the corner of Tempest and Chester-streets, and in the midst of a dense population. The walls are of red brick, with facings of picked white-burned bricks, and the design is Gothic, adapted to the purposes of a school. In the basement will be a large covered play-ground, well ventilated and lighted, besides a kitchen, stoves, &c., and the ground-floor will contain the infants' schoolroom, 54 ft. by 30 ft., and a room for the younger infants and babies, 50 ft. by 22 ft. On this floor will also be a stove, room for books, and class-room accommodation, &c. The boys' school-room, 54 ft. by 30 ft., and the girls' school-room, 37 ft. by 32 ft., will be on the upper floor, where cloak and class rooms, lavatories, &c., will be provided. The architects are Messrs. Royle & Bennett, Manchester, and the contractor is Mr. J. Howard, Hulme. The cost, including furniture, laying out of playground, &c., will be 6,000*l.* Messrs. Shillito & Shorland's school grates are used.

STAINED GLASS.

Lincoln. — A new stained glass tripartite window has been added to the Church of St. Martin, thereby filling up the whole of the north side of five windows with decorated glass. The subject is the Three Marys of the Gospel. For the whole of the fifteen windows which now adorn this church, the same artists have been employed, Messrs. Ward & Hughes, of London. Only four more windows have now to be filled in.

Knighton (*Leicestershire*).—A stained-glass window has been placed at the east end of the south aisle of this church, to the memory of the late Mr. John Allen. It is the work of Mr. A. Gibbs, of Bedford-square. The stonework has been restored, and a new window inserted, from designs, and under the superintendence, of Mr. W. Jackson, of Leicester.

Ozleworth.—A new stained window has been placed in Ozleworth Church, to the memory of the late Sir John Rolt, the subject being "Gamaliel pleading on behalf of the Apostles."

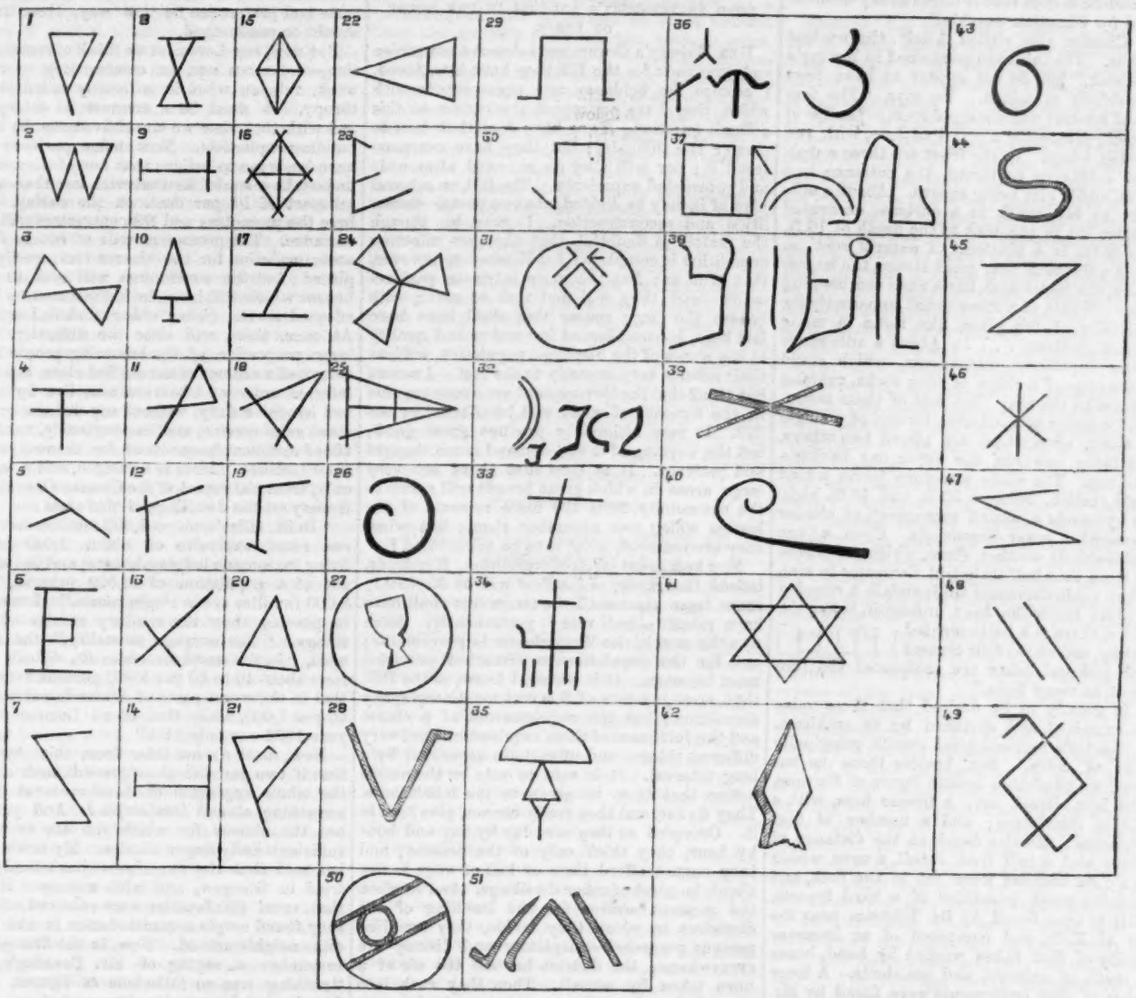
Basingstoke.—Two new windows have lately been placed in the chancel of the Parish Church of Basingstoke. They are the gift of a gentleman in memory of his wife, and the subjects are chosen from the domestic life of Holy Scripture. The principal figures are, in one window, three matrons from the Old Testament; in the other, three from the New. In the former Eve occupies the centre, screened by the Tree of Knowledge with its forbidden fruit; beneath is a panel representing the beginning of labour, "When Adam delved and Eve span." On the right hand of Eve is Ruth the gleaner, beneath whom is the scene of Orpah departing while Ruth cleaves to her mother-in-law. The figure on the left of the centre is Hannah, who is seen in the panel below visiting the child Samuel at the yearly sacrifice, and bringing the "little coat" as a gift; Eli is seated in the background. The New Testament window contains the three Maries. In the centre is the mother of our Lord, with the infant Saviour in her arms; beneath is the child Jesus, "subject to his parents," and at work in the carpenter's shop. The planks on which he is at work take the form of a cross. On the right is Mary Magdalene holding the alabaster box of ointment, and underneath the sisters of Bethany, Martha and Mary, the latter sitting at the feet of Jesus. The remaining light shows Mary or Salome, the mother of James and John. These windows were erected by Messrs. Lavers, Barraud, & Westlake.

Tunbridge Wells.—Two memorial windows have been set up in Emmanuel Church,—the one in memory of the late Mrs. George Jones, by her family; the other to the memory of Mr. Walter Fairbanks, son of Mr. Charles Fairbanks, late of Southborough. The work was executed by Messrs. Holland, Son, & Holt, of Warwick.

Harberton.—A specimen of stained glass, in the Perpendicular style, has recently been placed in one of the windows of the north aisle of Harberton Church, to the memory of Mrs. Wynne Pendarvis, by Major Trist, of Tristford. In the principal openings are subjects representing Four of the Acts of Charity. In the bases are shields bearing the arms of Trist, Rooke, Hoare, Wise, and Pendarvis. In the tracery above are figures of our Lord in glory, and adoring angels. The work has been executed (from a design by Mr. Manktelow Driffield) by Messrs. Beer & Driffield, of Exeter.

Charlbury.—As an addition to the recent restoration of the parish church, a stained-glass window has been placed therein, on the left side of the chancel, near the altar, to the memory of the late Mr. B. J. Whippy, by his widow. The window is of ancient design, in rich colours, and contains two divisions, each having different representations of "The Good Shepherd." The window was supplied by Messrs. Clayton & Bell, of London, and was fixed in the church by Mr. Henry Baskett, plumber, of this town.

Exhibition at Lower Norwood Institute. The exhibition of science and art at this Institute hat been signally successful, and throughout the present week has been a subject of considerable interest to the neighbourhood.



MASONS' MARKS, FROM TARTÛS AND JEBEIL, IN THE NORTH OF SYRIA.

MASONS' MARKS FROM THE NORTH OF SYRIA.

RUAD AND TARTÛS.

MR. GREVILLE J. CHESTER, who has recently visited these little-known places, has sent an account of his journey to the Committee of the Palestine Exploration Fund. Aradus, the Biblical Arvad, now called Ruad, is a small rocky island, very little raised above the level of the sea, with a double harbour protected by rocks and ancient moles. The modern population occupy nearly the whole of the island. Along the edge of the harbour, both on land and in the water, are scattered about great numbers of columns of grey granite, turned black by age, which once, in all probability, formed colonnades and open markets, like those at Tripoli, Byblus, and Tyre. "Far the most interesting remains, however," Mr. Chester writes, "are those of the sea-walls, which belong apparently to an earlier epoch,—that, namely, of the substructures at Baalbec, and the megalithic remains of Amrit. The immense stones of which these walls are built seem to have been hewn out of the rock on the spot. Some of the stones are 10 ft. to 12 ft. long by 7 ft. and 8 ft. high." These stones do not show the marginal draft or bevel; four have deep grooves cut into their upper surface on the side next the land, three of these indentations being semicircular and one square. They were, perhaps, intended as holdfasts for the cables of ships. The largest fragments of the existing walls are on the western side, *i.e.*, towards the sea. They are set on a platform of rock cut even for their reception, and are of four or five courses inside, but of more towards the sea. The total height is probably between 30 ft. and 40 ft. No mortar has been used. In one place a great oblong ring has been left projecting seawards from the face of a stone, doubtless for the purpose of securing the cable of a ship. At the foot of these fragments lies a narrow terrace of levelled rock, washed over by the waves, and a few yards from the wall is a small islet, also levelled artificially, as if for the construction of a temple.

The walls of Aradus have been spoken of as "double"; but Mr. Chester failed to find any evidence of this fact. They were, however, he observes, originally of great breadth. No inscription was found on any of the stones.

On the south side of Ruad are the remains of houses with chambers cut in the rock; in some of them a few shallow niches, perhaps intended to hold lamps; in others, the old plaster still remaining. There are also baths, public and private, one of which is lined with plaster, into which have been let bits of red pottery. Open spaces appear to have existed between the walls and the main town. Here the fissures left between the rocks after they were smoothed down are filled in with waterworn gravel, pottery, bits of marble, and rubbish, which, by the infiltrations of water charged with lime, have been converted into a mass of solid breccia. The flat surface so obtained, although in some cases showing the foundations of ancient houses, was generally kept open for traffic. The water-supply was wholly drawn from rock-cut cisterns, of which there are reported to be 400. The Greek inscriptions mentioned in Murray's Handbook are said to have been carried away to France. Two uninscribed altars are still in existence.

From Aradus, Mr. Chester went on to Tartûs (Tortosa), where the principal buildings consist of the castle and the cathedral. The former is an immense structure of massive drafted masonry. Mr. Chester considers it to be of crusading date, which may have incorporated with itself constructions and masonry of an earlier date. The stones exhibit many masons' marks.

The cathedral is thus described:—"It stands outside the walls of Tartûs, to the south-east of the town, and is in an extraordinarily perfect state of preservation. Its plan displays a lofty nave and aisles, separated by tall but massive piers, with columns with Corinthianising capitals. The west front has a pointed doorway with a large three-fold window above it, of which the third light is above and between the other two. Seen from within, nothing can be more perfect than the proportions of this noble triplet. On either side, at the west end of each wing or aisle, is an elegant lancet window with a small square window above, the southernmost lancet having its moulding on the left side ending in a sculptured lion. Over the great western entrance is a large slab of red granite. The church consists of four bays, besides the sacrarium, each of which is separated externally by a massive square buttress. The east end, with three apses, has each apse square outside; those to the north and south, together with two vaulted sacristies, being as it were, enclosed in two square towers, which do not rise higher than the roof. This, although described in Murray's Handbook as 'entirely gone,' is, on the contrary, intact. It is of vaulted stone, and into the lower part of its curve small square-headed windows have been cut. In each bay of the side aisles is one lancet window, and in some instances are two lancet windows. The south door is ornamented

with a rich moulding. The condition of this noble church is such that it might at any moment be used for Christian worship."

Mr. Chester also visited Amrit, the ancient Marathus. The ruins are mentioned in Murray's "Handbook," but do not appear to have been ever carefully examined. He says, "The first object of interest was a scarped rock, to the left of the track, presenting a principal face, with two projecting wings. In the front are three round-headed entrances to tombs, the entrance to a tomb on either side being square. About a mile further to the south is a curious excavated enclosure, cut in the rock to the depth of 10 ft. In the midst is a platform of natural rock, on which is a shrine of four great stones, the largest of which, the uppermost, has a rude overhanging cornice. Within is a stone bench, apparently for the divinity of the place, like those in many Egyptian grottoes. . . . . About a mile south are four sepulchral monuments, which stand near the edge of a ridge of grey rocks, running parallel with the sea. The first of these monuments* consists of a pedestal, formed of a single vast stone, upon which are placed two others, which taper upwards, the upper one having a conical top. The whole structure forms a kind of rude obelisk, between 30 ft. and 40 ft. high. Close by stands a second monument, of similar but somewhat lower dimensions. Upon a huge pedestal stands another stone, which, at somewhat more than half its height, decreases in size, and then again decreases till it ends in a rounded top. Just below the apex, and again below the shoulder, there is a battlemented moulding, and at the four corners of the pedestal below are sculptured the fore parts of as many lions."

It is greatly to be desired that these ruins were examined and sketched by an architect. Mr. Chester's archæological results principally consist of coins. But besides these he has secured an admirable bronze figure of Fortune, in the best Greek art; a bronze boss, with a Christian inscription; and a number of flint implements. He also found, at the distance of an hour and a half from Jebeil, a cave, within which rude benches were cut in the rock, and containing great quantities of a hard breccia, similar to that found by Dr. Tristram near the Nahr el Kelb, and composed of an immense quantity of flint flakes worked by hand, bones and teeth of animals, and sea-shells. A large number of flint implements were found by Mr. Chester on the Ras of Beyrût.

We have engraved, with the permission of the committee of the Palestine Exploration Fund, the marks sent home by Mr. Chester. Nos. 39 to 51, inclusive, are from Jebeil; Nos. 39 and 48 are marked "Outer Wall"; 40, 41, and 49, "Keep"; 42, "in relief; House, Jebeil"; and 51, "Cathedral." The previous Nos., 1 to 38, appear to be all from Tartûs; 28 and 35 are marked "Outside North Wall," and 34, "North Gateway."

Mr. Chester notes that Nos. 26, 28, 35, 38, 39, 44, 50, and 51 "appear to be older than the rest."

With two or three exceptions, which are only doubtful, these marks are all Christian and European, and were used chiefly in the eleventh and twelfth centuries, though some of them are found in all countries and of all dates. Similar marks, notably the hour-glass form, No. 3; the N form, Nos. 45 and 47; and the double triangle, No. 41, will be found in the collection made by Mr. Godwin, and partly published in the *Archæologia* (vol. xxx.), and partly in our volume for 1869.†

A Painting by Rubens.—The *Journal de Dunkerque* says that a beautiful original work by Rubens has been discovered, disguised by dirt and dust, in the church of Notre Dame, at Cassel (Département du Nord), on the occasion of the restoration which the paintings of the church are undergoing. It was only when the superincumbent coat of dirt, the accumulation of ages, was removed, that the importance of the discovery was recognised. The painting represents the appearance of the Virgin to St. Francis of Assisi. It is said that, after being cleaned, the picture proved to be well preserved.

* See also Murray's Hand-book, p. 559.

† Vol. xxvii., pp. 237, 245, 246, &c. In the same volume will also be found a collection of marks from the North West Provinces of India, and from Upper Assam, p. 505.

ARTISANS' DWELLINGS BILL.

LORD SHAFTESBURY'S ADDRESS IN THE HOUSE OF LORDS.

HER Majesty's Government deserve our praise and gratitude for the Bill they have introduced. I admire the boldness and perseverance with which they have addressed themselves to this difficult question. They have done their best to master the difficulty; but they have not mastered it; nor will they do so, until after wide and protracted experience. The Bill, on a broad view of it, may be divided into two parts,—demolition and reconstruction. It may be, though the matter is doubtful, that the part affecting demolition is complete; I will assume, however, that it is so; but the more intricate part remains—and they will find that to cover with houses the large spaces that shall have been laid bare, houses adapted in number and quality to the wants of the displaced population, will put their scheme very severely to the test. I cannot but think that the Government are over-sanguine in the forecast of what will be effected by the Bill. It may ultimately produce great good; but the working of it will demand much thought and patience. It is true that there are very large areas in which great benefit will result to the community from the mere removal of the houses which now encumber them; but when they are removed, what is to be substituted?

Now look to the *effects* of demolition. Hundreds, indeed thousands, of families will be *displaced*; some for a time until the tenements shall have been rebuilt; but many permanently. Such was the case in the Westminster improvements; and for the population so disturbed provision must be made. It is stated, I know, in the Bill, that arrangements of this sort must accompany demolition; but the requirements of a clause and the fulfilment of those requirements are very different things, and oftentimes separated by a long interval. It is vain to rely on the ample notice that is to be given to the inhabitants. They do not, and they really cannot, give heed to it. Occupied as they are, day by day and hour by hour, they think only of the present; and they cannot afford time or loss of wage to run about in quest of other dwellings. And so when the moment arrives for the levelling of the domiciles in which they reside, they are like persons possessed—perplexity and dismay are everywhere; the district has all the air of a town taken by assault. Then they rush into every hole where they can be received; some near, some very far off; though all struggle to be as close as possible to their former dwellings. Streets and houses, already overcrowded, become doubled in population. Every demand of health and decency is set aside; and people submit, by compulsion, to the greatest moral and physical degradation. I need not multiply instances, though I could well do so. But all that I have stated was seen when New Oxford-street was constructed, and the St. Giles's rookeries were destroyed; the masses in Church-lane—a district already seething with life—were, in consequence, increased two-fold. And in Westminster, to make room for Victoria-street and other handsome improvements, a nation of men, women, and children was driven out; many of the old ones went into the workhouse, and never escaped from it; many fled across the water, suffering great privations, until they had formed new connexions of work; and many pressed into the swarming rooms of the neighbourhood, the landlord, in numberless instances, where the poor inhabitants had two rooms, taking from them one, and then forcing them to pay for the single as much as they had paid for the double apartment.

Now I would not have spoken on the present occasion had not the subject before us been one on which I have been engaged ever since 1843; one to which I have devoted a great deal of time and attention; and yet I am no nearer the solution of the problem than when I began it.

I mention all this to show the necessity of much care and circumspection in your preliminary operations. My noble friend has said, and very truly, that the labourer must in many cases reside near his work. That is exactly the point I am insisting on. It is so, even with several classes of the skilled artisans. Take, for example, the watchmakers of Clerkenwell. They must live near together, because, as no one of them is rich enough to possess a complete set of tools for his minute and delicate business, they borrow of each other; a mutual service that could not be rendered were they far apart. And I concur again with my noble friend that suburban dwellings will not give the full remedy we seek,—they will furnish but a part of it,—nevertheless, if taste and preference lie that way, these tastes should be encouraged.

But now, my Lords, let us think of reconstruction,—we must not, on commencing so vast a work, rely on what is ordinarily called philanthropy. It must be a commercial enterprise; and with that view we must have recourse to the building capitalists. Now such experience as I have leads me to believe that few of them would undertake a work like that with less than a fair prospect of 10 per cent. on the outlay. But here the promoters and the contractors will be at variance. The promoters will of course desire accommodation for the classes temporarily displaced; but the contractors will seek to erect houses which will bear the highest rent by being adapted to the richer order of skilled artisans. At once, then, will arise the difficulty. The large proportion of the labouring people in the metropolis are not of the skilled class, but of the inferior order of labourers who live by casual and irregular duty, without any definite or constant employment, and, consequently, unable to afford sufficient house-room for themselves and their families. Here is a sample, and a sample only, from the report of the Charity Organisation Society on the dwellings of this class:—

"In St. Giles's, about 3,000 families have only one room, exclusive of about 2,000 persons living in common lodging-houses; and in Holborn, out of a population of 44,809 persons, about 8,000 families are in single rooms." I may just in passing show the sanitary results of such things. "The average mortality," the report adds, "in the worst streets in St. Giles's varies from about 40 to 60 per 1,000 persons living, and that in the worst parts of Whitechapel averages 40 per 1,000, while that of all London for the year 1872 was only 21·4."

Now, must we not infer from this statement that if two parishes alone present such a mass, the whole aggregate of London must present something almost intolerable? And yet these are the classes for which you are to provide sufficient and proper abodes. My noble friend has said that the experiment has already been tried in Glasgow, and with success. He says that some 250 families were removed, and that they found ample accommodation in the immediate neighbourhood. Now, in the first place, I remember a saying of Mr. Canning's, that "nothing was so fallacious as figures, except facts"; but I must also observe that an experiment made on 250 families is widely different from one to be made on some thousands; and we must also ask what was the precise class of the parties removed, and we must consider, moreover, the distinctive peculiarities of the Scotch and English character.

But when my noble friend makes his calculations as to the possibility of erecting cheap tenements for the poorer sort, he must remember that the cost of buildings already erected, and the rent put upon them, do not furnish a proof that similar results may be attained in the present day. The price of material is higher than it was; and the rate of wages in the building trade is so advanced that, in order to make a remunerative profit, a much heavier weekly payment must be imposed on the occupier of apartments, whether they be constructed on the separate or the block system.

Well, what are we to do? Are we to construct a vast number of single rooms in order to meet the means of these poor people, or are we to build houses according to our new sanitary requirements? If we reconstruct single rooms, we shall maintain a most indecent and most immoral state of things; if, on the other hand, we do not, rents will be raised so high that it will be perfectly impossible for the people to bear the demands that will be made upon them. I am speaking now of labourers who have no regular work of any kind, and not of skilled artisans. These men live from hand to month, and have to take work as it comes, just at the moment. At the docks, for instance, men may be seen standing in single file forty or fifty deep. There they remain for hours in the hope of getting work, and were they not on the spot they would stand no chance of being employed. The earnings of these men, whose employment is dependent on the wind and the arrival of the ships, are extremely small. When there is plenty of work they make about 17s. a week, but taking the average throughout the year, their earnings in the aggregate do not exceed 9s. 9d. a week. Then, as to their abodes. Some single rooms are let for 2s. 6d. and 3s. 6d. a week,

but there are some of these people who pay as much as 4s. 6d. a week for a single apartment. You must remember, too, that although the wages of skilled artisans and those who have fixed labour, have risen very considerably, the earnings of the class I have been alluding to have not perceptibly increased, owing partly to the nature of the work, and partly to the great influx of people from the country every year. Now I must repeat that, unless we reconstruct dwellings adapted to their means, great injury will be inflicted on the people who are displaced.

Yet there is one form of remedy well worthy of consideration. We can adapt, drain, and ventilate old tenements, courts, alleys, and *culs-de-sac* at a far less outlay than is required to construct anything new. The society with which I am connected (the Labourers' Friend Society) has made, and successfully made, such efforts on a pretty large scale. We began it some years ago, and since that time the plan has been pursued, and with very good results, by an energetic lady, Miss Octavia Hill. Let me show your lordships some of the happy results. Take, for instance, Tyndall's-buildings, in Gray's-inn-road. We got possession of this court, and renovated it at a cost of 2,699*l.* 19s. 11d. Well, on an average of seven years, from 1864 to 1870, the return has been 5¼ per cent. It contains eighty-seven rooms for families; and your lordships will bear in mind that the inhabitants are of the poorest class of labourers, mostly Irish, who cannot afford to pay more than from 1s. up to 2s. for their week's lodgings.

This court I had long coveted, for it was filthy, miserable, and disorderly beyond all precedent. Fever was never absent; and I can answer, from personal inspection, that I at least have not descriptive power enough to say what it was physically and morally. Nevertheless, we had courage for the work, and the issue had better be stated in the words of two authorities of some value in the district. The medical officer reported that fever was now unknown in that locality; and the police-constable, who for a long time had been acquainted with the wretched place, assured me that while formerly the police always went down the court by couples, they had now seldom occasion to go there at all.

Similar statements may be made in respect of Wild-court, near Drury-lane. It contains 100 rooms for families, which families are also mostly Irish. It was renovated at an outlay of 3,364*l.* 19s. 11d., with an average per-centage of 4¼. I may add without going into details, the like results have been obtained in Clarke's-buildings, in St. Giles's-in-the-fields.

Now I venture to suggest this plan: it is, unquestionably, worthy of consideration, as a partial, not as a complete, remedy. Surely, in every area where there is to be a wide demolition, some of the best buildings might be reserved for improvements and adaptation, the only mode whereby we shall be able, at least so far as we know at present, to better the domiciliary condition of the great bulk of the labouring classes. But whatever be the determination of higher powers, I will venture to express a hope that all will be done with care, circumspection, and, above all, not in haste. If the clearances be gradual, it will be far more easy to make provision, temporary or permanent, for those who are driven out. I have been much among the people in such circumstances; and I know what they suffer; and I know, too, how they bear it. I have often heard the language of complaint and sorrow, but never of sedition or revenge. The law thus carried into effect may, by God's blessing, do much good; and my noble friend may take this assurance to his heart,—*His brevibus principiis via sternitur ad majora.*

THE SALFORD TOWN-HALL.

THE enlargement and decorations of the various offices, &c., contained in the Salford Town-hall are now nearly completed, and the council met in their chamber on the 2nd inst. for the first time to resume business. The council chamber is a fine room in the Greek style, 52 ft. long by 28 ft. wide, and 23 ft. high, and has a coved and coffered ceiling, which has been handsomely decorated. The flat of the panels is dark blue, with diaper in grey, white, and yellow. The mouldings surrounding the panels are picked out with two tints of blueish green, relieved with two shades of buff, intersected by a Greek fret of buff and gold. The cove of the ceiling, springing from the cornice, is painted a neutral fawn-colour, and ornamented by various allegorical devices, supported by a well-designed flat ornament in three colours. Over the mayor's chair are the borough arms, on the side of which are medallion figures representing Commerce and Plenty. At the opposite end of the room are the Royal arms, with the emblems of Justice and Mercy. On the one side of the room are the arms of the Duchy of Lancaster, supported by figures representing Literature and Industry, and on the opposite side are the arms of the County Palatine, supported by Wisdom and Science. The predominant colour in the cornice is buff, relieved with gold, with a geometrical ornament in brown and black. The pilasters which divide the walls into compartments are in imitation of Sienna marble, with Aberdeen granite base, black and gold marble skirting and mouldings. The walls are a delicate bluish-green, and the window furniture maroon and gold curtains. The work has been executed by Mr. Thomas Ellison, decorator, of Bury New-road, Manchester, who himself painted the medallions. Messrs. Strode & Co., of London, have placed in the ceiling two of their patent sunlights, and the effect altogether is very satisfactory.

NEW MUNICIPAL BUILDINGS AT KIDDERMINSTER.

ON the 24th ult., the mayor (Ald. Goodwin) laid the memorial stone of new municipal buildings. The directors of the Public Rooms Company offered to the corporation for a little more than 8,000*l.*, or only about two-thirds its cost, their property, consisting of music-hall, corn-exchange, free library, school of art, and other adjuncts. The council accepted the offer, and resolved to erect municipal offices at the side of these buildings. The contract for the new buildings is 7,546*l.*, so that at a cost of about 16,000*l.* the town will possess public buildings the intrinsic value of which is said to be, at least, 20,000*l.*, everything included.

The buildings consist of two main divisions, one of which affords accommodation for police purposes, and the other for municipal and magisterial business. The police department is approached by a lofty entrance gateway, which will form a connecting-link in the elevation between the new block and the present Public Rooms, and the access to the municipal offices will be had through a spacious entrance-lobby opening into a large hall, in which is the main staircase. On the ground-floor are the police-rooms, consisting of day-room, 22 ft. by 15 ft., superintendent's office, and weights and measures offices; and there is an underground approach to the police-cells lying at the rear under the police-court, with which they have a direct communication. The borough surveyor's offices are approached from the main entrance-hall, and consist of two rooms, with a small dark room for gas-testing, and a strong-room. On the upper floor, which is reached by a staircase 6 ft. wide, are the town-clerk's offices (three rooms and a strong-room); the mayor's parlour, 28 ft. by 14 ft. 6 in.; the council chamber, 36 ft. by 24 ft.; and the public court, 38 ft. by 24 ft., with magistrates' retiring-room, 7 ft. by 13 ft.; and witnesses' room, 14 ft. by 10 ft. The façade will be treated in a free Italian style, the main feature being to harmonise with the adjoining Public Rooms.

Mr. T. Meredith is the architect; and the contractors are Messrs. Bennion & Son.

CASES UNDER THE METROPOLITAN BUILDING ACT.

WOODEN BUILDINGS.

MR. JARVIS, district surveyor of Camberwell, summoned Mr. Hall, of 45, Church-road, Camberwell, florist, before the magistrate at Lambeth Police-court, for having erected a wooden building 12 ft. long, 8 ft. wide, and 10 ft. high, in the fore court of his house, contrary to the Metropolis Building Act.

The Surveyor stated that the building in question was used as a shop in which plants were exhibited for sale, and was enclosed on all sides with wood, contrary to No. 1 clause, 1st schedule, preliminary, of the said Act.

It was urged by the solicitor for the defence that as the erection had wheels fixed to it, and it could be moved about, it was not a building.

The magistrate, however, ruled that it was a building, and made an order accordingly.

STAFFORD BOROUGH HALL.

BESIDES the Shire-hall Assembly-room, the use of which cannot always be obtained, and a little theatre in St. Martin's-lane, Stafford, has hitherto been without any public room adequate to its requirements. A short time ago, Mr. H. D. Pochin, of Manchester, offered to give to the Corporation the sum of 3,000*l.* towards a new town-hall. This gift was not readily accepted. The Corporation could not find either a site for the building or the money necessary to be added to Mr. Pochin's contribution. At length, however, a site was found. The borough surveyor was instructed to make a design, and the mortgage upon the Corporate property was augmented by a further charge of 6,000*l.* The plans of the building were prepared; the tender of Messrs. John Hayes & Sons, builders, Birmingham, for 7,150*l.*, was accepted; and on the 31st ult. Mr. Pochin laid the foundation-stone.

The style of the new hall will be Early French Gothic, rock-faced, ashlar and smooth dressings being used up to the first-floor windows. The upper part of the elevation will be brick, with stone-dressings, &c. In the centre, over the principal entrance doorway, will be a large tracery window with a balcony, and a range of four smaller tracery windows on either side. There will be three gables in the front, with a bold wheel-window in each. The roof will be all high-pitched, and surmounted by an ornamental cresting at the angles, and springing from each gable will be a pedestal for some grotesque figure. The internal dimensions of the main building will be 112 ft. by 50 ft. The principal entrance to the assembly-rooms will be in the centre of the front elevation, and open into a spacious entrance-hall leading directly to the principal staircase. The side entrance and staircase will be at the west end, and at the east end will be a wide entrance to the yard and out-offices. The whole of the front floor of the main building will be appropriated for the assembly-room, 103 ft. by 50 ft., including the stage and proscenium at the east end. The roof of the assembly-room will be plastered at the collar-beams, which are to be exposed. The ceiling will be divided into panels, which are intended to be decorated. The height from floor and moulding at the springing of the curb is 30 ft. 3 in., and the extreme height to the collar-beam, 39 ft. The frontage facing Eastgate-street is 122 ft. in length and 40 ft. in height.

PROPOSED NEW LIBERAL CLUB HOUSE AT BRADFORD.

THE plot of land bounded by the continuation of Darley-street, Kirkgate, Queensgate, and Bank-street, is to be cleared for the erection of a pile from the designs of Messrs. Lockwood & Mawson, architects, Bradford. Messrs. M. Rhodes & Son, jewellers, Westgate, will occupy the front to Kirkgate, and a portion of Darley-street and Queensgate; next will be the property of Mr. Varley, of Staningley, and the remaining portion will form the new Liberal Club House. The whole will be in the Italian style; but each owner's premises will be treated a little differently in detail, showing where one property begins and another ends. The general design includes shops on the ground floor, and the buildings will be four stories in height. The front entrance to the club will be in Darley-street. Owing to the rapid fall in the street level, a rise of 11 ft. up the broad staircase will bring the visitor to the dining or coffee room, 51 ft. by 36 ft., with a height of 20 ft., lighted on each side with tall windows, a bay window being placed in the end looking on to Bank-street and the Exchange. Over the dining-room will be the billiard-room, of the same size, with a height of 15 ft., also lighted on each side. The smoking-room will be 50 ft. by 24 ft., the reading-room 24 ft. square, and the kitchen, 35 ft. by 24 ft., will be above. Ample accommodation is provided for the servants, and there will be a separate entrance to the club from Queensgate. The principal staircase, lighted by a dome in the roof, will be 45 ft. wide. The cost of the entire scheme is estimated at about 30,000*l.*

Tything District Church, Worcester.—The promoters of this scheme have now appointed a sub-committee for the purpose of seeking a site for the new church. Mr. Priddey, formerly a resident of the city, has been appointed architect.

THE DWELLINGS OF THE POOR IN MILE END OLD TOWN.

TWO cases which came before the Mile-end Old Town Vestry at their meeting last week were strongly illustrative of the necessity which exists for sanitary and constructive improvements, in that locality, in the dwellings of the labouring classes. In the one instance the medical officer of health and the surveyor had reported, in reference to a number of houses in Upper York-place, that they were not fit to live in, and that unless certain constructional and other improvements were immediately made, they advised the Vestry at once to take steps for their demolition under the Artisans' and Labourers' Dwellings Act of 1868. The owner of the houses attended the meeting, and although he raised some objections to the reports he did not deny that the houses needed repairs, but wished for two months' grace to execute them. The feeling of the Vestry, however, was against such a length of time being given, and Mr. Atrell, one of the members, in moving that a month only be given, remarked that more disgraceful erections did not exist in the parish, and the worst punishment which could be inflicted on the owner would be to make him reside in one of the so-called "houses" for a month. Another member observed that the owner deserved no sympathy, as last year he evaded the action of the Vestry by shutting up the "houses" for a time, and his representation that he had done the work was untrue. Eventually the Vestry resolved to give the owner a month only, the Chairman intimating to him that if the repairs were not carried out by that time they would at once take action for the demolition of the houses. The other case was a striking instance of overcrowding in the district. The Medical Officer of Health reported that there was a house in Ben Jonson-road, consisting of twenty reputed rooms, but of these eight consisted of four larger rooms on the first and upper floors, each of which was divided by a partition into two compartments, one portion being deficient in both light and ventilation. Upon the occasion of a previous visit the medical officer found that there were fifty-one persons living and sleeping in the house, and in one instance, at least, there was a separate family in each of two compartments alluded to,—one consisting of a husband, wife, and five children; the other, of husband, wife, and two children, allowing about 100 cubic feet of space to each person. On the recommendation of the Sanitary Committee the Vestry resolved to serve the owner with notice to suppress the overcrowding.

WELSH CALVINISTIC METHODIST CHAPEL, MOSS SIDE, MANCHESTER.

THIS chapel is situate at the corner of Moss-lane East and Lloyd-street, and was opened for divine service on the 30th ult. It is designed in the Early Pointed style of architecture, and has accommodation for 800 persons. The galleries extend to three sides of the building, that portion immediately opposite the pulpit being circular. The principal entrance consists of an arcaded porch having three pointed-headed openings, which, together with the two-light and circular windows over them, form the main features of the principal elevation facing Moss-lane. The chapel is about 64 ft. by 46 ft. on the ground-floor. The roof is in one span, being supported by principals having curved ribs, those at the intersection of the slightly-marked transept (introduced for the sake of external effect) being diagonal.

In the rear of the chapel, and facing Lloyd-street, is the chapel-keeper's residence, the vestries, &c., being placed between them, together with a corridor which connects the whole with the school-buildings consisting of a main school, 64 ft. by 37 ft., class-room, library, porches, hoist, tea-room, heating-apparatus cellar, and other requirements. The roof of the main school-room is also in one span, the roof being of open construction and ceiled at the collar.

The greater portion of the internal woodwork is stained and varnished; the whole of the walling, internally, is plastered, and the windows of the chapel are filled with lead-lights, many being of geometrical design and filled with coloured glass. The floor of the vestibule is laid with Maw & Co.'s tiles.

Externally the main buildings are faced with parpoints, the dressings generally consisting of Yorkshire stone, Hollington being used in the spire, which is octagonal in form, and, together with the tower, stands at the main angle of the building, and forms one of its most noticeable features. The total height being about 95 ft. The roofs are covered with Welsh slates, of diverse tints, cut to pattern, and surmounted by an ornamental cresting.

The total cost of the buildings, including a considerable outlay necessitated by defective foundations, is about 8,500*l.*; and the whole have been executed by Mr. Mark Foggett, of Cheetham, builder, from the designs, and under the superintendence of Mr. John Lowe, architect, Manchester.

DIFFICULTIES WITH APPRENTICES: CAUTION.

"NOTICE.—Ascension Day.—As the apprentices are not entitled under their indentures to a half-holiday on this day, notice is hereby given, that any apprentice absenting himself during the afternoon of this day, without special leave from his foreman, will be liable to legal penalties for so doing.—By order, May 6, 1875."

The above memorandum was posted up between five and six on the morning of Ascension Day in the workshops of Messrs. Stephenson & Co., ironfounders, of Newcastle, and at six o'clock no less than 123 apprentices to this firm came on to work, and at half-past twelve all the lads struck work, and absented themselves. Each apprentice was separately charged before the police magistrates "with having absented himself from his employment without leave, and contrary to an order issued by his masters." A distinct charge, Henry Bousfield, was taken to represent the whole batch; and Mr. Joel, the prosecuting attorney, stated a case that deserves attention on the part of masters owning apprentices, particularly at a period when the complaint from nearly every trade is that neither parents nor boys can be got to enter into indentures, even without premiums.

The attorney said, as he was instructed, the lad Bousfield was bound on the 13th of January, 1871, to serve a certain term. He had served four years and two months, and his time would expire in January, 1876. On the 6th of May the whole of the apprentices absented themselves from work. He was bound to admit that for many years previously the apprentices had been in the habit of having a half-holiday on Ascension Day—the day they now struck work. On the present occasion Messrs. Stephenson found it inconvenient for the lads to go away on that day, and thought it necessary to alter the form of contracts under which the apprentices were bound. In their indentures the holidays granted were New Year's Day, Good Friday, and Christmas Day; and the half-holidays were, on Easter Monday, Tuesday, Whit Monday, Tuesday, and Shrove Tuesday.

Sir John Lubbock's Bank Holiday Act does not appear to take cognizance of apprentices' holidays, and here the London as well as the country apprentices are getting up a fight.

Messrs. Stephenson had resolved to adhere to the form of indenture, and caused a notice to be stuck up early on the morning in order that the whole of the apprentices might see that the holiday was not permitted.

Other evidence having been given,

Mr. Bush, for the defence, said the apprentices were acting on a supposition, and were justified in doing so, that they were entitled, as of old, to a half-day on Holy Thursday. It had been the custom in these particular works for thirty-six years to have this holiday. It was true the indentures did not mention Ascension Day; neither did they Sunday or other holidays. When the apprentices were at work they were bound by a deed, and bound by the practice that existed at the time their indentures were first put into force. No regulation that had been made since the indentures were signed could bind or alter those which had been the custom, and had been the usage, exclusive of the indenture, in those works for thirty-six years. Then as to the notice. It was only posted up a quarter before six in the morning of the day on which these lads had been in the habit of leaving for a half-holiday from time immemorial. New rules had also been put up; but he contended they did not affect the old rules under which these apprentices enlisted.

Witnesses were called to prove the custom, and further that they always received wages for this half-holiday.

The Chairman of the Bench, Mr. Cail, said the apprentices were clearly guilty of an infringement of the law, under extenuating circumstances. The notice was very short, and the lads had some reason to think they had a right to the half-day. They would all be fined 5*s.* each.

VENTILATION IN ST. GEORGE'S HOSPITAL.

LORD KINNAIRD sends us copy of a letter addressed by him to the Duke of Sutherland, in which he says,—

"I observe that you were one of the committee who met at St. George's Hospital, to witness and report on Mr. Tobin's system of ventilation in one of the wards, and very properly declined to pronounce an opinion as to whether Mr. Tobin's plan of ventilation was a new thing or not. It certainly is no new invention, for it is now more than thirty years since I introduced a plan of admitting air into a building, and giving it an upward current to strike the ceiling, and become diffused without causing draughts. That plan is in effective operation, not only in my own rooms at Rossie Priory, but in schools, cottages, stables, cow-houses, and hot-houses on the estate. No doubt, the diluting of foul air with pure oxygen is a great advantage; but no system of ventilation can be satisfactory unless the vitiated air is taken off as it ascends, when warm, at the ceiling, instead of being drawn off by the fireplace or some other opening lower down. This I provide for by a pipe, on the syphon principle, inserted in the wall, opening in the room near the ceiling, and its outlet end carried into the flue near the mantelpiece, a cheap and simple contrivance, of continuous action, which never gets out of order. Where windows are not available, a slit in the wall should be made, 2 ft. or 3 ft. broad, with an upward inclination inwards, the opening being above the heads of the cattle (in dwelling-houses above the heads of the inmates), with a flap regulator."

PAISLEY TOWN-HALL COMPETITION.

THE committee appointed to adjudicate upon the plans in this competition, having appointed Mr. Mathieson, of H.M. Board of Works, Edinburgh, to assist them in selecting the most meritorious designs, after several meetings and repeated inspection of the various plans, held their final meeting on the 3rd inst., and, guided by the advice of Mr. Mathieson, they unanimously awarded the first place to the plan bearing the motto "Fortuna Sequatur," the second to that with the motto "Experientia," and the third to that with the motto "The Moon." On the envelopes with the relative mottoes being subsequently opened, it was found that the first plan was by Messrs. Rennison & Scott, architects, Paisley; and the third by Mr. Henry Higgins, junior, 273, Dumbarton-road, Glasgow. With reference to the second, it appeared, that while there were two plans bearing the motto "Experientia," there was only one envelope with this motto. It was accordingly agreed to communicate with the architect whose address was enclosed in the envelope so marked, and ascertain whether he had lodged two plans, or, if not, to describe his plan for identification.

The style of Messrs. Rennison & Scott's design is Early French Gothic. The amount to which competitors were limited is 20,000*l.*

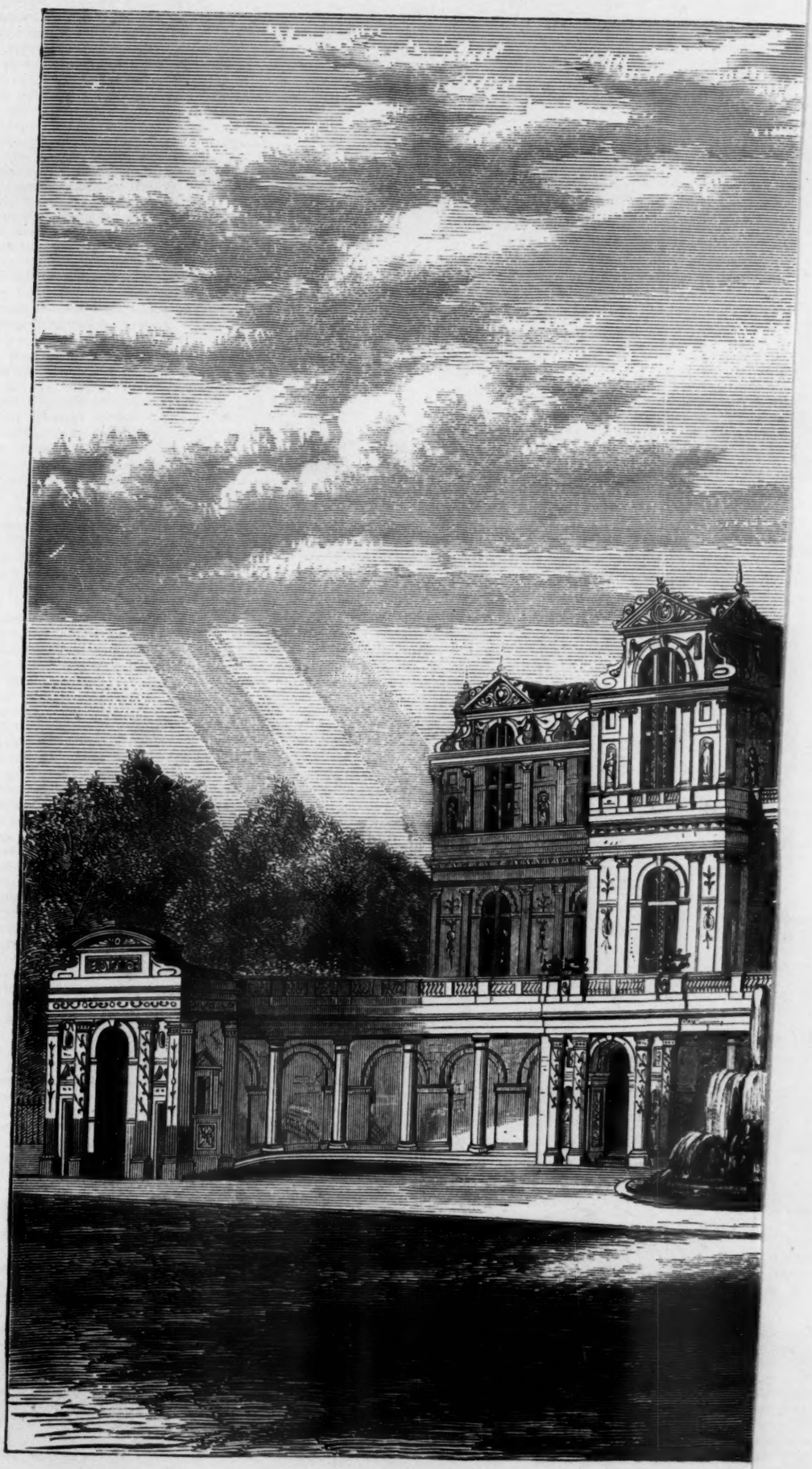
We have received a letter, signed "B. Smiles," objecting strongly to the decision. The writer says:—"The premiated design will cost at least 60,000*l.*, as any competent professional man would state. The drawings are shaded in violation of Article 5 of the instructions, and are accompanied by no specification whatever. The second and third premiums are awarded for designs that will each cost 40,000*l.*, and are shaded in disregard of the instructions. A number of the competitors have complied rigidly with the instructions and have occasion to feel that they have been unjustly treated."

THE NEW NATIONAL OPERA HOUSE, THAMES EMBANKMENT.

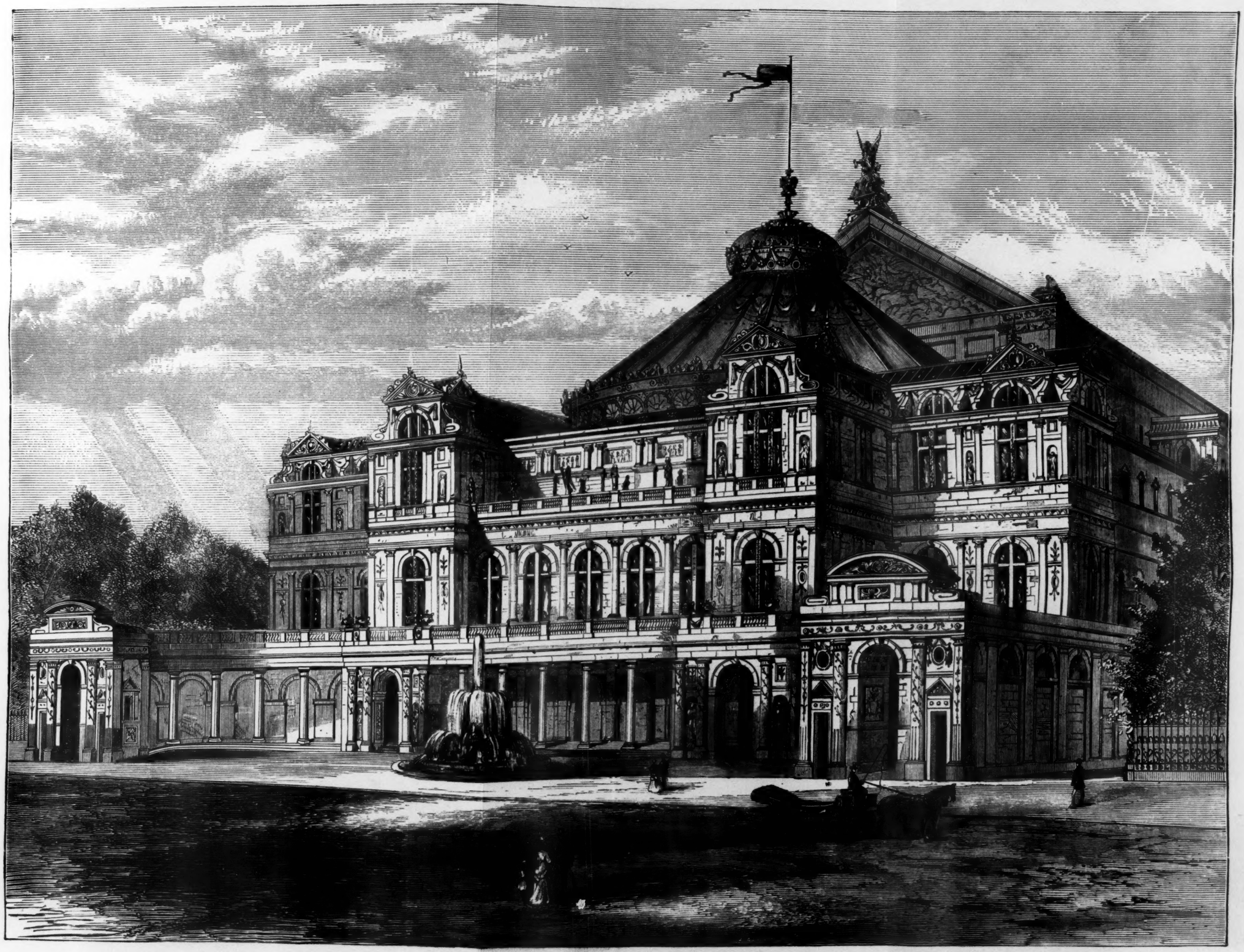
WE give in our present number an illustration of the design submitted by Mr. F. H. Fowler, architect, and selected in the late competition. The building will cover an area of 190 ft. by 200 ft.; a superficial area, it is stated, one-third larger than that of Covent Garden Theatre. It is to be perfectly isolated, a roadway being preserved on either side, so as to open up direct communication with Parliament-street, opposite the Foreign and Colonial Offices. The preliminary works of taking out the ground are being proceeded with by Mr. Webster, the contractor. It is supposed that in consequence of the bad substratum a depth of 30 ft. will have to be attained before putting in concrete. This will, it is hoped, be effected during next month, when his Royal Highness the Prince of Wales will be asked to lay the first stone. The interior dimensions of the auditorium are nearly the same as in La Scala in Milan. The form of a horseshoe, somewhat elongaged, has been adopted. The foyer, or grand *salon*, will be on a level with the grand tier, and will be at least 100 *ft.* long.

There will be a siding into the Opera House from the Metropolitan District Railway.

Discovery of an Ancient Bible.—A copy of the edition of the Bible printed by Gutenberg at Mayence, between 1450 and 1456, was discovered last autumn in the vestry of the Church of Klein Bautzen, in Saxony. It is printed partly on paper, partly on parchment. It was presented to the church in 1677, and had lain nearly 200 years among the Psalm Books and Bibles, being mistaken for a manuscript Bible. It has been purchased for 450*l.* by an English collector.



SELECTED DESIGN FOR THE NEW



SELECTED DESIGN FOR THE NEW NATIONAL OPERA HOUSE, THAMES EMBANKMENT.—MR. F. H. FOWLER, ARCHITECT.

THE ARTIST AND THE AMATEUR.

IT is unreasonable to expect that an artist will be satisfied unless his work is appreciated. He may indeed do much to satisfy the longings and aspirations of his own soul; he may have the strongest conviction that his work is worthy of approval; but without the stimulus of sympathy of some sort, his mind is certain to be burdened with an incubus which cannot be thrown off. If he secures the approval of contemporaries who have gained a high position, he may then, even although not appreciated by others, and unsuccessful in a pecuniary point of view, be satisfied that his labour is not in vain. But he may have still greater reason for satisfaction if he meets with the generous approval of the culitvated amateur who has made art his study for no other reason than the love of art, and who is not swayed by professional predilections.

There is apt to be a spirit of rivalry amongst contemporary artists, who, in the heat of the strife, cannot with coolness and deliberation pause to adjudicate upon the work of those with whom they contend. The very fact of one artist taking up a peculiar stand-point, from which he views the field of art, acts as a disqualification to his fairly gauging what does not lie within his immediate range of sight. Mere technical excellence is too often considered the acme of perfection. He is apt to overlook that higher aspiration, that appearance of undeveloped power, which underlies a work, and which, although in a sense unsuccessful, is sometimes more worthy of admiration than the achieved success of another. The best check to this is a vigorous expression of opinion by those outside the profession, who can give reasons for the faith that is in them, and who have no personal ends to serve.

The artist himself is undoubtedly in the best position to judge of the technical qualities of art workmanship. He alone who has had personally to contend with difficulties can adequately appreciate them, but they often make so strong an impression as to nearly obliterate all else. The more subtile elements of originality and inventiveness may be pushed aside, and the form lost under the detail.

A fine appreciation is not always combined with original invention; and even although it may be, the power of execution may not have been acquired; it is sufficient, therefore, for the non-professional critic to express his opinions, and it would be absurd to ask him to give an example of what he desires.

The general education of the artist is too often of a very limited character, and confined to his own peculiar province. Mathematical exactness he may have, and be entirely devoid of poetical feeling; he may be embued with an intense love of nature, and be quite ignorant of history; he may have some knowledge of anatomy, and be obtuse in the observation of character. He who is confined to one chamber of the palace must certainly know every small feature of it, better than he who ranges through the halls and corridors, and has acquired a general knowledge of the arrangement, decoration, and furnishing of the whole building.

The architect must possess a knowledge of styles, in order to be able to produce satisfactory work. The work itself may, however, although perfectly accurate in every particular, be cold, spiritless, and devoid of beauty; nay, it may even possess a considerable amount of beauty, but that may have been produced by the mere accurate copying of a fine original conception. Such a work may be admired by those not in the secret, but they who have a knowledge of the subject are in a better position to judge of its true merits.

There are two classes of individuals,—the poetic and the prosaic,—each looking upon the proclivities of the other with disfavour. The sublime ignorance of art displayed by some is only surpassed by the supreme dogmatism of their dicta regarding it. "Looking through their own loopholes, they fancy they see the whole world." The ever-varying form of the clouds and delicate gradations of colour, which fade away in the distance, may be reflected in the retina of the eye, but not photographed on the brain. The taste must be cultivated before it can be of value, practically or theoretically.

To the merely practical man of business usefulness is the acme of perfection; if a building is adapted to the purposes for which it is intended it matters little to him that it is devoid of expression. If a church more resembles a concert-hall than a place of worship, that is no concern of his provided he is comfortably seated, and can hear and see well. Expression in architecture, and that higher fitness (which does not necessarily militate against usefulness) which accords with refined natures, is to him a myth, a stumbling-block in the way of utility. He has no idea of making a sacrifice for art, however small, unless it will pay or contribute towards his comfort or desire for ostentatious display. A trumpery erection coated with cement and made to imitate stone is quite as good as one produced in the genuine material, if it attracts the eye and answers the purpose of an advertising medium. And as there are literary hacks ready and willing for hire to pander to a vitiated appetite, so are there men following the profession of architecture equally willing, for a like consideration, to foster a debased taste regardless of the effect it has upon the progress of the art. These charlatans do find admirers amongst the vulgar and uncultivated; but the man of culture and refinement looks upon them, not so much with a feeling of hatred or contempt as with a certain degree of disgust.

There is another class of architects, honest and enthusiastic, but without originality or firmness, who are wafted about by every breeze. No sooner does an architect of ability produce a novelty than it is caught at, imitated, and lauded as the one thing needed. What was once considered contrary to "true principles" is defended on the ground of picturesqueness, and beauty is found in objects which were formerly passed every day unobserved. To the calm and dispassionate observer these escapades afford a source of amusement similar to that he would derive from looking on at a fancy ball. The figures are decked out in ancient costumes, but the modern face and action are plainly discernible notwithstanding the bygone fashion of the garb; it is not worn with perfect ease and naturalness; it is put on for the amusement of the passing hour, and it becomes the wearer passing well, but he will be more at ease and natural in the garb he dons on the morrow. Having "strutted and fretted his hour" as prince or noble, he subsides into his wonted oblivion.

No one would now, if he could help it, travel by the slow, cumbersome, jolting diligence, with its plunging team, urged on by a quaintly-attired postillion in high boots and long whip; it is picturesque enough, but the shrieking, whirring railway train is preferable. During these fine summer days, however, when on pleasure intent, we do not object, nay, we decidedly prefer, the resuscitated and well-appointed stage-coach which dashes along between bushy hedges, past gabled cottages, and over bridges spanning clear streams, giving one a sense of freedom and enjoyment unknown in a pent-up railway compartment. All old fashions are not to be despised: it depends upon how they are used, and how far they are compatible with modern requirements and ideas.

TEMPERED GLASS.

SINCE we first mentioned in our columns the important discovery of M. de la Bastie, much has been written by contemporaries on the subject; and there can be no doubt that his invention, which consists in "tempering" glass to such a degree as will make it, under certain conditions, practically unbreakable, is deserving all the attention it has aroused, being, as we think, destined to create a complete revolution in the mode of applying metals for industrial and other purposes. There is scarcely a branch in the whole domain of arts, sciences, and manufactures, where its usefulness will not in time be appreciated.

We advisedly use the word "tempering," having been informed by M. de la Bastie's agents in this country that this can be considered the only proper designation of the treatment the glass undergoes; and that the expression often used, "hardened" or "toughened" glass is incorrect.

The treatment to which glass to be "tempered" is subjected may be compared with Bessemer's process of converting steel. The secret of the process consists in the proportion in which the materials used for the tempering bath,—tallow and other oleaginous substances,—are mixed, as well as in the exact temperature at which the glass is plunged into the bath. This much is known, however, that the composition of the compound and the temperature of the bath are varied according to the different descriptions of glass to be treated. M. de la Bastie met with many difficulties in carrying on his experiments; but he has now successfully overcome them all. He raises the glass to a very high temperature. The hotter it is the less is the risk of breaking the glass, and the greater is the shrinking or condensation. Hence the advantage, and often the necessity, of heating the glass to the point of softening, which is attended by the difficulty that glass in this condition gets readily out of shape, so that it must be plunged into the bath almost without touching it. In plunging the hot glass into a heated combustible liquid, the latter is apt to take fire, and cannot easily be extinguished, so that time and material are lost. M. de la Bastie now places the tempering bath in immediate connexion with the heating oven, and prevents access of air. When the articles in the oven are heated to the required degree, they are made to slide (the floor of the oven being made to cant, so that it may be turned to a sloping position) into the adjoining bath without being handled, ignition of the bath being prevented by the exclusion of air. To avoid the clearness of the glass being affected by the furnace-flame, it is heated in a muffle, to which the flame has no access, being applied externally. The shock of the fall of the glass into the bath is prevented by a sheet of wire-gauze, or asbestos fabric, on to which the glass falls. The changes which glass thus treated undergoes are remarkable; but it is thereby made fit to resist pressure to which ordinary glass would succumb.

We have said that this invention will cause an entire change in the application of metals to industrial and other purposes. We ought to have stated that it may in time completely replace such metals as lead, copper, zinc, iron, for certain purposes. The latter are almost unlimited. Besides the vast importance of the discovery to manufacturers of chemicals, who are stated to be the most eager to make use of it, its application is hundredfold, as it may be introduced into all branches of industry where formerly iron, lead, copper, &c., were employed. Pipes and receptacles in chemical manufactories made of this glass will not be attacked even by the most powerful acids. In breweries, its use will especially recommend itself, on account of its cleanliness, for pipes and vats, the latter now generally made of slate, the former of copper or lead.

Varied as will be its application for scientific and industrial uses, its utility for domestic purposes will be considerable. It will be a boon to the careful housewife; besides its utility for all articles of common household crockery, china, hot-water and washing apparatus, M. de la Bastie's invention will in future relieve her mind of all anxiety regarding her most favourite china and glass, for, if "tempered" by this process, they will be proof against the carelessness of the most careless servants. To give an illustration. Amongst several articles which we inspected and tried, one, which appeared to us to be a common china plate, turned out to be of the tempered glass enamelled on the top. It was thrown on the floor, gave forth a bell-like sound, but did not break. In fact, it may be thrown about anyhow without breaking. A square piece of glass, about ¼ in. in thickness, was put into a wooden frame, resting only with its sides on the latter, and we were surprised to find that it sustained the weight of an adult man. Chimney-glasses and globes will fly directly if the gas is turned on too suddenly on lighting up; tempered glass will stand any sudden changes. It is even stated that pipes made of this glass will withstand the greatest pressure, and that it would be worth while trying it for water-pipes. If it were once established to be proof against frost, what discomfort would be spared the householder of London, who looks, at the breaking up of frost, for the bursting of his water-pipes and its concomitant misery, as regularly as to the non-appearance of watering-carts when an east or north wind is blinding him with dust.

We should not omit to mention that there is a great probability of the efficiency and durability of the new glass being put to a severe test. We are informed that there is some prospect of its being used for the large tanks of the new Westminster Aquarium, now in course of erection. The glass plates forming the sides of the tanks are, of necessity, of such an enormous thickness, to insure safety, which is not always obtainable, as to make their construction very expensive. Glass tempered by M. de la Bastie's process, it is stated, need only be of a quarter the thickness of ordinary plate glass used for that purpose, and will even then resist any possible amount

of lateral pressure under the circumstances. Besides other and innumerable industrial uses the new glass is also spoken of as the material for the rollers for machines for calico-printing; and last, not least, it may possibly be used for large printing-types. The agents are in communication with a well-known type-founder, who intends bringing out his idea of using the tempered glass for types. There is no doubt that tempered glass will last longer than either metal or wood.

Besides the manifold uses to which we thus see the new glass may be applied, there is said to be one other advantage connected with it, and that is that a great saving will be effected in cooling the glass. Glass manufacturers know too well, and to their cost, how much glass is yearly spoiled in cooling. Expensive cooling apparatus are now generally constructed; but, still, the bill for spoilt glass is very heavy. The new process is said effectually to prevent all such waste.

We may add, in conclusion, that the erroneous impression has got abroad that Messrs. Abel Rey & Brothers are the agents for the sale of articles manufactured of tempered glass. We are requested by them to state that such is not the case. They are merely empowered, and their only concern is to effect sales of royalties to glass manufacturers or other persons wishing to make use of the invention in their particular branches of industry.

THE PATENTS FOR INVENTION BILL, 1875.

SIR,—On behalf of the Artisans and Inventors Patent Bill Amendment Committee meeting at this address, formed for the purpose of securing amendments in the Patents for Inventions Bill, 1875, we beg to send you the substance of the resolutions which the committee have adopted, showing the objections they take to the Bill in its present shape.

The committee consists of artisans and inventors, and persons professionally and commercially engaged in devising and practically applying new inventions; and, therefore, directly interested in the commercial and industrial prosperity of the United Kingdom.

The Bill bears evidence of an attempt to do justice to the interests of the inventor and the public, yet it contains many provisions which, while they must prove highly injurious to artisans and inventors of small pecuniary means, as tending to debar them from obtaining any material benefit from the efforts of their ingenuity, will be most detrimental to the public welfare, as such provisions will in various ways discourage the improvement of our useful arts and manufactures.

The objectionable provisions in the Bill are the following:—

(*a.*) *The requirement of the deposit of the full specification as the very first step* in obtaining protection for an invention, the effect of which will be, that until an invention is complete in all its details, no protection will be obtainable, nor advice or assistance to be had in regard thereto, without jeopardy; which requirement will also entail on the inventor the payment at the very outset (subject to the chance of loss if the application be rejected) of a considerable sum of money for costs of specification; matters of very great importance not usually effected without the employment of professional assistance, unobtainable except at some considerable expense.

(*b.*) *An Examination* before the grant of letters patent, which will be highly objectionable, inasmuch as it will form the groundwork for rejecting an application for a patent "by reason of the frivolous character of the invention rendering it not worthy of a patent," a matter no man, nor any set of men, can with any certainty be capable of deciding; as what may appear to be frivolous to one person will seem of importance to another; and, moreover, as this proposed examination is to take place before the invention has been practically tested in the workshop, or in actual industrial use, the decision must necessarily be arrived at upon very insufficient data.

It is desirable that there should be an inquiry into *novelty* previously to the issue of letters patent, based upon the examination of prior specifications of patents, public documents, and publications, or upon sufficient evidence offered by legitimate opponents. But the extension as proposed of such inquiry beyond novelty cannot prove otherwise than absolutely mischievous, as discouraging inventors, and therefore injuring the public.

(*c.*) The provisions of the Bill for *shortening some patents to seven years'* duration; in the vast majority of cases fourteen years being, as experience testifies, not too long. It is, however, submitted that if it be considered desirable, to meet the case of minor inventions (such as some of those now registered under the Utility Designs Act), to allow short patents for seven years to be taken (with the chance of renewal if the proper authority allows same); this might be effected by offering the option of suing out such short patents at one half the stamp-duties at each and every stage, beginning with the application which would induce many inventors to apply for the shorter term of patent.

(*d.*) The provisions as to forfeiture of the patent *for non-working of the invention within two years* from its date, and as to *compulsory licences*, is very mischievous, and no possible excuse exists for such enactments, except, perhaps, as applicable to cases where a patentee is proved to be abusing or misusing his patent rights and privileges; and such cases are so rare that they are practically no evil.

Further, the Bill requires amendment in its provisions generally, and especially as regards the power given to the Commissioners to make rules "prescribing and regulating (*inter alia*) the deposit of models in such cases as they think fit," as this would enable the Commissioners to call for models whenever they please, and thus entail a heavy burden on inventors, accurate models not unfrequently entailing the cost of 100*l.*, or even larger sums of money. Therefore the deposit of models should not be compulsory in any case.

The committee regret to find the Bill does not practically reduce the Government charge for a patent, which is what is greatly needed by artisans and inventors of small pecuniary means, who constitute the great majority of the inventors of this country, and who have for years past been complaining of the high scale of stamp duties imposed on patents in the United Kingdom; and if the Bill now before Parliament is not so altered as to allow provisional protection on deposit of a provisional specification for a sum of money not greater than a 1*l.*, as would be preferable, the first step to protection of an inventor should, at all events, be very cheap.

In regard to the Government dues on letters patent, there is no valid reason whatever why the cost of securing the right to obtain remuneration for devising and developing an invention should amount to many pounds, whilst the right to remuneration for literary work under the Copyright Acts does not amount to many shillings; copyright, moreover, unlike patent-right, not being limited to fourteen years, but extending to forty-two years certain, and even exceeding that term in case the author lives longer. As artisans and workers, on behalf of industrial progress, the committee feel that an injustice is done them by heavily mulcting them, because their brain-work relates to our industrial progress, which would not be the case if it related to our artistic progress or literary work, and the Bill ought to be amended, so that all stamp-duties be much smaller in amount, especially the stamp-duty payable at the first stage.

We are, Sir, your obedient servants,
THOMAS PATERSON, Chairman,
C. GRAHAM CARTTAR, } Joint Hon.
THOS. MOTTERSHEAD, } Secretaries.

14, *Clement's Inn, Strand, W.C.*,
June, 1875.

A PRETTY PICTURE OF MIDDLESBROUGH.

THE town of Middlesbrough, that lays claim to be a model borough of neatness, cleanliness, and all that can be desired, in sanitary matters, has been thus described by one of its own officers, in a report to its Sanitary and Drainage Committee:—

"Myself and assistant have made an inspection of nearly the whole of the town. We have served, during the last three months, 600 notices on owners and occupiers, mostly for wet ashpits, defective drains, and for whitewashing houses and yards. But there is yet a large number of back streets, or 9 ft. passages, still unpaved. Some others are in a very bad state. But what I want most especially to call your attention to is several old places in the town where ashpits are still uncovered, and are of large area, with the whole surface covered with filth, disseminating gases from the excrement and decayed vegetable refuse, which is injurious to health.

I wish also to call your attention to the midden system in a large part of the borough, more particularly where large rows of ashpits are placed, and emptied into the narrow 3 ft. passages, contaminating the air between two rows of houses, and the occupiers, inhaling the fœtid atmosphere, causing enteric fever and other diseases. Scarcely one of these ashpits but is a nuisance, and when the contents are emptied into the narrow 20 ft. or 30 ft. street, the stench in these places is inhaled, and dangerous to the health and lives of people living near, more particularly to children of tender years. I would advise, with the consent of the borough surveyor and medical officer, to compel all owners of property to put in sanitary pail-closets. It would do away with the filthy state of the back streets, and make them fit to live in, instead of, as at present, the occupiers having to close their doors and windows to prevent the stench from percolating into the dwellings."

In reply to this recommendation, a member of the Sanitary Board said he believed the pail-closet system, adopted at Rochdale, at considerable cost, had now been given up, because the "game was not worth the candle."

THE NEW COUNTY LUNATIC ASYLUM AT BANSTEAD.

AT a meeting of the magistrates of Middlesex, on the 27th ult., at the Sessions House, Clerkenwell, Mr. A. Robinson moved, pursuant to notice, "That the plans and estimates now submitted to the court for the erection of the aftermentioned works at the third county lunatic asylum at Banstead be approved, viz.:—For erection of boundary walls, gateways, and entrance-lodge and weigh-bridge, at a cost of 8,879*l.*; farm buildings and fencing, 7,760*l.*; boundary walls of cemetery, 707*l.*; mortuary, 300*l.*; and that the committee appointed by the court to provide a third lunatic asylum be authorised to carry out the said works at a cost not exceeding the sum of 18,500*l.*" He said the plans had been submitted to the Commissioners of Lunacy, and they persisted on the mortuary being erected for the reception of male and female bodies in separate places, and that caused increased expense.

The Marquis of Salisbury said this was a small matter financially, but the requirements of the commissioners were so grotesque that he believed if the court saw fit to fight the question, the commissioners would have to give way in the face of public ridicule. He thought, however, as the matter was so small it was not worth while to fight it.

The report was then adopted.

Mr. Robinson then moved—"That the clerk of the peace be directed to execute the contract to be prepared between the committee and Messrs. Eastons & Anderson, the plans for which are now submitted to the court, and for the execution of which works the court granted a sum of money on the 23rd July, 1874."

The motion was put and agreed to.

PLASTER CASTS.

THE Prussian Government has offered two prizes of the value of about 150*l.* (3,000 marks) and 500*l.* (10,000 marks), respectively, for the discovery of a new method of cleansing plaster casts, statues, &c., and for the invention of a new material possessing the advantages of plaster, but which will not deteriorate by repeated washings.

As to the first, the method must be applicable in equal degree to all kinds of plaster occurring in trade, and must not diminish the hardness of the cast. In order to entirely preserve the delicacy of the form, those materials are absolutely excluded which do not soak into the plaster. It is not necessary to preserve the original colour of the plaster; a yellowish tint, or any warmer tint, may be allowed; but the evenness of the colour is at any rate indispensable.

As to the new material, it must easily allow casting in original moulds, without their becoming more injured than with plaster, and it must reproduce the mould as exactly as plaster. The solidity of the material must not be less than that of plaster, so that it may be used for the largest casts. Casts made of this material must stand repeated washings with soap and lukewarm water. The price of the material must not considerably exceed that of plaster; and the price of the moulds for casting must likewise not considerably differ from that of plaster moulds.

Competitors are to forward their consignments to the Royal Prussian Ministry of Public Worship, Instruction, and Health (Königl. Preussisches Ministerium der geistlichen, Unterrichts, und Medicinal Angelegenheiten), not later than 31st December, 1875.

Opening of New Board Schools at Burton-on-Trent. — Victoria-road Schools, which cover a site of nearly an acre, and are intended to accommodate 800 children, were publicly opened on the 24th ult. by Mrs. Henry Wardle, wife of the chairman of the Burton District School Board. These premises are the largest of the kind under the jurisdiction of the Board, and are situated in a very populous district west of the Midland Railway. The architects were Messrs. Giles & Brookhouse, of Derby. The schools cover an area of land about ¾ of an acre in extent, and are capable of accommodating 800 children. The foundation-stone was laid about fourteen months ago by Mr. S. C. Allsopp.

THE HASTINGS COUNCIL AND THE TOWN HALL PLANS.

AT the monthly meeting of the Hastings Council on Friday, the 4th inst., the Building Committee brought up a report, recommending that the premiums for the Town Hall designs should be given to "Palmam Perseverando," "Con Amore," and "St. Michael," "subject to having fulfilled, in every respect, the conditions mentioned in the instructions to architects, and giving, if required, satisfactory proof that the design can be executed for the sum named therein." A long and warm discussion arose.

The Town Clerk having stated that he had received a protest from "Con Amore," Mr. Councillor Hughes (builder) opposed the reading of the protest "until after the plans had been passed by the Council." His motion that the letter be not read was adopted.

Mr. Hughes then moved that the report of the committee, which had been carried by a large majority, should be adopted. There were plenty of practical men in the Council, and, as was now known, the choice had happened to fall upon two local architectural firms.

Mr. Russell having seconded,

Mr. Alderman Gansden said that he had moved, in committee, that an eminent London architect should be called in to decided on the plans. As that was defeated by a large majority, he would not now move an amendment, but state his own view. The Council had taken upon itself to become arbiters between all parties, and they were bound to do something more than merely carry out their own fancies. They had advertised for the best design, with a certain amount of accommodation, and at a definite maximum cost. The "Palmam Perseverando" plans had very grave defects. The Council had sent back five sets of plans because they did not give the required area to the large hall. But he now found it was proposed to give the first prize to a plan which had 622 ft. superficial in that room less than the Instructions required. In doing so he could not see they were acting fairly towards other competitors. Amid interruptions from Mr. Hughes and others, Mr. Gansden pointed out that the plan showed no corridors to pass from one part of the great hall to another, that the principal entrances were at the objectionable position of being by the sides of the platform, that the retiring-rooms were within the big room, and that the police cells and some other rooms did not give the required area. He also alluded to the probable cost of the building, and asserted that the design did not come up to either of the requirements laid down in the Instructions. The arrangement in the design "Con Amore" was, to his own view, far superior. It was very well for gentlemen to say they had spent many anxious hours in deciding; but to say there was no town interest in it would be simply ridiculous.

Mr. Councillor Hill (architect) felt more and more sorry that Mr. Gansden's motion was not carried in the committee meeting. In the interests of his profession he felt he could not be silent, and must stand up in its behalf. Shortly after the plans were put up, he had heard, outside the Council, that two local firms of architects had coalesced to produce a plan, but he did not know which it was until the last meeting. He then saw immediately by the voting which it was. In justice to his profession he must say he thought the thing had been entirely mismanaged, and he deeply regretted it was so.

After some further discussion the report was adopted.

DRAINAGE, NORTHAMPTONSHIRE.

AT the last quarterly meeting (held at Rothwell, Northamptonshire) of the Association of Sanitary Inspectors of the combined sanitary authorities in the counties of Northampton, Leicester, Rutland, and Bucks, under the presidency of Mr. Haviland, the medical officer of health to the combined area, the following resolution was adopted:—

"That this Association, after very carefully considering the different systems of sewage disposal, is of opinion that it is desirable to represent to the delegates of the combined area the necessity of their determining on adopting some dry portable system, such as that of the Goux Company under the entire superintendence of the Inspector of Nuisances as the simplest system of disposing of village 'sewage.'"

The president at the same meeting gave an outline of his late visits to Halifax and Aldershott, where he had seen the Goux system in full operation, and spoke strongly in its favour.

"GRINDING MONEY."

AN action was recently brought in the Clerkenwell County Court, by Mr. Double, a carpenter, against Mr. Elkington, of Golden-lane, St. Luke's, builder, to recover ninepence for grinding money in lieu of notice. The case was heard before Mr. G. Whitbread, the judge, on the 1st inst. The plaintiff conducted his own case. The defendant was represented by Mr. Jennings, solicitor, Leadenhall-street.

The plaintiff stated he had been in the employ of the defendant, and was discharged on the 14th of April last, at a few minutes before 5 p.m. He had been paid one hour's grinding money, but claimed two, alleging that it was the general custom of the trade to pay two hours' grinding money to carpenters and joiners, and that defendant had paid two hours in several cases in which workmen had summoned him to that court. In support of his case he called a fellow-workman (Mr. Ham).

Mr. Jennings, in addressing the court on behalf of the defendant, cited the case of Saunders & Stevenson *v.* Fisk (reported in the *Builder* the 4th March, 1871, p. 171); also the cases reported in the *Builder* of 24th April last.

The defendant, upon examination, proved that he only allowed one hour's grinding money. The reason he had paid when summoned on former occasions was, that he had been prevented from attending the court. He also admitted having paid a few exceptionally good workmen two hours.

Mr. Russell (defendant's foreman) corroborated defendant's evidence.

Mr. Grover, of Packington-street, builder, stated that he did not pay grinding money, and denied any general custom for two hours. He had been summoned to that court on two or three occasions for grinding money, but the plaintiffs had been non-suited.

Mr. Devereux, of Albion-road, builder, was next called. He denied the existence of any general custom for two hours, and stated that he paid one hour only. In his experience, he found that the moment a man received notice he ceased to work, but he did not grind his tools. He generally left the shop, and did not return until the expiration of the hour, sometimes not until the next day, for his tools.

Mr. C. Goolden, secretary of the Central Association of Master Builders of London, was next called. He stated that in February last he sent a circular to about 600 master builders desiring to be informed how far the allowance in time or money for "grinding" should be regarded as an "old or established" custom in the trade. Replies had been received from 109 firms only, from which he established that the custom which had existed when the men were engaged by the week had, since the hour system had been adopted, ceased to be general; about one-third of the firms allowed two hours, one-third allowed one hour, and one-third did not recognise grinding allowance at all. That, therefore, the balance of evidence he had collected was decidedly against the existence of a "general custom" of giving two hours.

The Judge, after complimenting the plaintiff on the skill he had shown in conducting his own case, stated from the evidence before him he was of opinion that the plaintiff had failed to prove the existence of any established general custom for payment of grinding money. He, therefore, had no alternative but to non-suit the plaintiff, with costs.

Mr. Ham, a carpenter, had also brought a similar action against Mr. Elkington.

The Judge, having ascertained that the evidence was in all respects similar to the foregoing, advised Mr. Ham to consent to a nonsuit, and a nonsuit was accordingly entered.

THORNBRIDGE, BAKEWELL, DERBYSHIRE.

DERBYSHIRE is rich in sites of villa residences and mansions. One of these, Thornbridge, built about 1785, by a Russian merchant, was sold three years ago to the present owner, Mr. Craven, of Manchester, who decided on taking down the old house, and erecting a more modern mansion in the Gothic style of architecture, which harmonises with many of the old Derbyshire buildings, such as Haddon Hall and others. The south front of the new house is well seen from the road leading to Hassop from Ashford. It has a central low tower, with a steeply-pitched roof and lead finial. Its gables are steep; windows mullioned; chimneys of dressed stone, set anglewise on their bases; the central door, richly moulded, has angle shafts with caps and bases. An oriel window forms a conspicuous feature over the door, and a bay window in the eastern gable is carried up two stories. The wall stone is principally from the old house, but has been hack-faced. The dressed stone is from Stanton Moor. The roof is covered with brindled Staffordshire tiles.

The interior, in addition to the usual entertaining rooms, of ample dimensions, has a lofty staircase hall, with the roof timbers decorated. The woodwork in this part of the house is of oak, and the lofty chimney-pieces are also of this material, with bevilled glass mirrors instead and many shelves and nooks for decorative chins, the lower portion being of various marbles manufactured by Mr. Twigg, of Ashford. The hearths are tiled, the fire-grates being made by Messrs. Longden, of Sheffield, and the hand-painted tiles by Morris & Co. Mr. J. B. Mitchell-Withers was the architect. The contractors for the mason-work were Messrs. Clubley & Stringfellow; and Mr. Robertson, was the joiner,—all of Sheffield.

PLYMOUTH HIGH SCHOOL FOR GIRLS.

SOME time since the council of this school felt it necessary to have plans prepared for the erection of a building capable of accommodating 200 pupils, with the power of enlarging it for 300. The gentlemen who have sent in plans are Mr. James Hine, of Plymouth; Mr. E. Appleton, of Torquay; Mr. H. J. Snell, of Plymouth; Mr. H. J. Paull, of London; and Mr. H. Moorshead, of Devonport.

SCHOOL BOARD SCHOOLS.

Sheffield.—On the 31st ult. the schools erected by the School Board in Darnall-road were opened. The building is of Durnford Bridge stone, the whole of the rooms being on the ground floor. The front erection nearest the Darnall-road contains the girls' and infants' departments; the girls having a schoolroom 48 ft. by 20 ft., and three large class-rooms, cloak-room, lavatory, teachers' retiring room, &c. The infants have a schoolroom 59 ft. by 25 ft., with a large semi-circular recess for gallery on one side, class-room, cloak-room, lavatory, &c. Behind this building is a playground, with covered sheds, at the rear of which is the building for boys, which contains schoolroom 50 ft. by 20 ft., three class-rooms, lavatory, cap-room, and teachers' retiring-room. A separate playground, with covered shed, is provided for boys. The school-rooms are warmed on the hot-water system known as "Perkin's patent," and the class-rooms have open fire-places. The windows have swing casements in the upper parts, the walls are boarded up to the window cills and plastered above, and the internal joiners' work is of pitch pine. The contract for the building, including fittings and furniture, is 5,735*l.*, and the number of scholars it will accommodate is 753, or, allowing 8 ft. for each child, 889. The contractor for the works is Mr. Thomas Hopkinson, of Retford.——The Park Schools, situated in Norwich-street, were opened on the same day. The front building will be occupied by infants on the ground floor, with school-room and two class-rooms; and by the girls on the upper floor, with school-room and three class-rooms. The boys will occupy a separate building in the rear, which has school-room and three class-rooms. The entrance will be from Duke-street-lane. The contractors were:—For the masons' work, Mr. James White; joiners' work, Messrs. Sharpe & Son; slating, Messrs. Harrison & Chadwick; plastering, Mr. A. Berisford; plumbing, Mr. J. B. Corry; and painting, Mr. J. Puttrell. Accommodation is provided for 738 scholars, as now calculated, or, 963, allowing 8 ft. for each. The contracts amount to 6,334*l.* 16*s.*, including fittings and furniture. The architects for both schools are Messrs. Innocent & Brown.

New Middle-Class School for Cowley St. John.—In consequence of the Middle-Class School in the Iffley-road, conducted by Mr. Shaw, being found inadequate for the accommodation of the scholars, the Rev. R. M. Benson is about to erect an extensive school on the site and grounds of the present iron church. Plans for the same have been prepared by Mr. C. Rolph, architect, of Reading, and accommodation will be provided for 200 boarders besides a large number of day scholars.

CHURCH BUILDING NEWS.

Fisherton (*Salisbury*).—The enlargement of this church is about to be commenced, the existing accommodation being insufficient for the requirements of the parish, the population numbering 3,673, and the seat-room in the church being only for 622. In accordance with the recommendation of Mr. Wyatt, the diocesan architect, it is intended to take down the north wall of the nave, and to erect upon a portion of the adjacent consecrated ground a north aisle, and to build an arcade between the nave and aisle; to take down the lower portion of the west wall of the nave, re-set the windows, form a new entrance to the church, and erect a porch; to erect a new staircase to the gallery at the west end of the nave; to remove and re-fix the prayer-desk and pulpit, placing the latter near the south-east corner of the nave, and to provide a new lectern; to remove the present stoves and apparatus for heating the building, and to provide a new heating apparatus in a chamber underneath the new aisle. It is estimated that the cost of the proposed works will be 1,600*l*., of which 1,330*l*. have been raised by voluntary contributions. By the enlargement proposed, 200 additional sittings will be obtained, half of which will be free and unappropriated.

Whittington (*Northwold*).—About seventeen years since the Rev. C. M. R. Norman, the late rector of this parish, purchased a small chapel which had been erected by the Wesleyan Methodists at Whittington, a hamlet at Northwold. This building, at his own expense, he converted into a district school church, it being used for the purpose of a school during the week and a church on Sundays. The ministerial labours of Mr. Thwaites here having necessitated further accommodation, Mrs. Norman, on the death of her husband, the rector, in 1873, to retain the services of Mr. Thwaites, who was specially ordained, undertook, at her own cost, to build a new church, and endow the same with 3,000*l*.; she also gave a further sum of 500*l*., the interest of which is to go for future repairs; and arrangements were made to convert Whittington into a separate parish. The edifice is now completed, and together with the churchyard has been consecrated by the Bishop of Norwich, and opened for divine service. The building, which consists of a nave and chancel, is built of Boxground Bath stone and Brandon flint work, and is in the Early Decorated English style of architecture, from a design by Mr. R. M. Phipson, of Norwich; the builders being Messrs. Bardell, Brothers, of Middleton and Lynn. The contract was 2,500*l*., but this was increased by "extras," &c. There is also an unattached parsonage, built of napped flint-work from Brandon, with red-brick facings.

Adwick-le-Street.—During the last few weeks considerable alterations and improvements have been made to the church at Adwick-le-Street, the principal portion of the cost being defrayed by Mr. Thomas Walker, of The Woodlands. Through this gentleman's liberality a new south front of stone has been built, and a new porch erected, the latter being constructed of stone, oak, and glass. This work has been carried out under the superintendence of Mr. W. M. Teulon, of London, by Mr. A. Clark, builder, of Adwick-le-Street. Additional interest has been added to the church by the insertion of two stained-glass windows, the work of Messrs. Ward & Hughes. The church floor has also been newly laid with tiles. The nave has been covered with plain, the chancel with plain and encaustic, and the reredos with glazed tiles. The cost has been about 800*l*.

St. Leonards.—A new church, which has been erected at St. Leonards at a cost of 20,000*l*., capable of seating 1,000 persons, was opened last week. The sermon was preached by the Rev. Malcolm MacColl, rector of St. Botolph, Bishopsgate, and the collection at the close amounted to 500*l*.

Haywood (*near Doncaster*).—The new church here is built, though within the boundaries of the parish of Burghwallis, just on the confines of the parochial districts of Burghwallis, Moss, Fenwick, and Owston. The edifice has been erected in memory of Mrs. Birch, a former inhabitant of Skellow Grange, by her husband, Mr. Scholes Birch, at a cost of about 3,000*l*. It is dedicated to All Saints, and is in the Gothic or Early English style. It consists of nave and chancel, with a tower and spire at the western end. The length of the building is 72 ft. and the height of the spire 100 ft. The nave measures 39 ft. by 22 ft.; the chancel, 22 ft. by 14 ft.; and the bell-tower is 11 ft. square. The church is built of stone from the Park Nook Quarry, and internally it is lined with white and red Pontefract pressed bricks. Outside there are three gable crosses. Internally, the small shafts of the chancel window, and those in the sedilia are of red Mansfield stone. The roof and the tower floor are of pitch pine, covered with patent inodorous asphalte felt. The porch and the priest's door in the chancel are of deal framing, covered with oak match boarding. The floors in the nave aisles, tower, and porch are covered with Staffordshire tiles, and that of the chancel with Godwin's tiles. The interior is fitted up with pitch-pine stalls, for 150 sittings. The font is of Ancaster stone. The eastern, or principal window, has been filled with stained glass, by Messrs. Clayton & Bell, of London. The bell in the tower weighs 8 cwt. It was cast by Messrs. Taylor, of Loughborough. The church is heated by hot air by means of a stove. The architects were Messrs. Buckeridge & Pearson, of London, but in consequence of the first-named gentleman having died soon after the work was commenced, the superintendence of the works devolved on Mr. Pearson. The builders are Messrs. Shillito & Morgan, of Campsall.

Seathwaite.—On the 17th ult. the Bishop of Carlisle consecrated a new church at the hamlet of Seathwaite. The new edifice, which stands on the site of the old chapel, has been built partly by the liberality of Mr. H. W. Schneider, of Belsfield. It was erected from plans prepared by Mr. Schneider, and executed by Mr. J. Brownrigg, of Bowness. Internally the dimensions of the chapel are,—length, 50 ft.; width, 18 ft.; and height from the floor to the ridge, 30 ft. The exterior is of plain, undressed, blue freestone, with Roman crosses of the same material, though dressed, over the eastern and western gables, and the entrance-porch, on the south side. Inside, the fittings and furniture are of plain polished pitch pine, the seats being capable of accommodating nearly a hundred worshippers.

Baxterley (*Warwickshire*).—Baxterley Church, so well known from the connexion of Bishop Latimer with it, has been re-opened by the Bishop of Worcester, after undergoing restoration and enlargement. The nave has been entirely rebuilt, and a new aisle added on the north side. The south wall, which was dangerously leaning over, has been rebuilt, and every feature replaced in its original position. The church is of early Norman date, but very little of the original remains. The flat plaster ceiling has been replaced by an open roof, to the old lines, and the gallery has been removed. The new aisle is divided from the nave by stone piers and arches. A porch of English oak has been added, and a new bell has been hung in the tower. The roofs are covered with red tiles. Messrs. Paull & Bickerdike are the architects, and Messrs. Fox, Brothers, of Atherstone, the contractors.

Grafton Flyford. — The village of Grafton Flyford was enlivened by the re-opening of the restored church, which has been entirely rebuilt, with the exception of the tower, after plans prepared by Mr. Hopkins, of Worcester, architect, the work being executed by Mr. Warner, of Malvern Link.

Hales Owen.—This old church, having recently undergone restoration, under the direction of Sir Gilbert Scott, has been reopened. The aim of the architect has been to preserve the ancient features of the fabric, to bring to light those which had been hidden by successive "restorers," and to restore those which had been mutilated. At the west end the floor has been lowered sufficiently to expose the bases of the columns supporting the roof. The roof at this part of the building has been restored, the old plate-roof being removed and replaced by purlins and tie-beams of oak. There not being sufficient funds to carry out the entire restoration of the oak roofing, and as the old plate ceiling of the north and south aisles will have to remain for a time, two temporary flying arches have had to be erected, both to support the plate ceiling and divide it from that portion of the west roof which has been restored. The north and south aisles were rendered unsightly by two wide galleries, whilst there was a children's gallery beneath the tower, which stands in the centre of the church. These galleries have been abolished, and the rough plaster has been removed from the base of the tower, laying bare the original stone. The roof of the body of the church has been renovated, an open perpendicular carved oak roof being substituted. On the southern side of the chancel traces of old Norman arcading have been carefully brought into view; whilst on the north side the ancient rood-loft staircase has been opened out. Between the east portion of the north aisle and chancel was an arch, which was carried in a very clumsy manner to the floor. The lower part of this aisle has been taken away, and the arch rests on two corbels. By the removal of a monument on the north side of the sacrarium, an old door to the vestry, a sedilia, and an old Norman window were discovered. These have now been once more cleaned. The church throughout has been paved with Godwin's encaustic tiles. The cost has been about 4,000*l*. Messrs. Collins & Collis, of Tewkesbury, were the contractors.

DISSENTING CHURCH-BUILDING NEWS.

Leeds.—A new Wesleyan Methodist Church, in Beckett-street, has been opened for public worship. The building, which is from designs by Messrs. Hill & Swann, architects, Leeds, is in the Gothic style, modified to suit the requirements of the denomination. It consists of nave, with transepts, the length being 59 ft.; width across nave, 37 ft. 6 in.; and across transept, 53 ft. 6 in. The roof is open, and ceiled across the collar-beam, and has arched rib bindings, the whole of the timbers being seen, and stained and varnished. The chapel will seat 600 persons, including the accommodation in the gallery, which extends round three sides of the building, and is supported on ornamental cast-iron pillars, enriched in colour and gold. Access is had through an open loggia of three arches, with shafts of Bolton Wood stone, into an entrance-lobby, extending the whole width of the chapel, with staircases to gallery and basement at each end of the same. Above the loggia is a large seven-light window, filled in with geometrical tracery and stained glass. To the left of this is an octagonal turret, which rises to a height of 78 ft. At the rear of the chapel is the minister's vestry. In the basement are vestries and school-room. The chapel is lighted by large starlights suspended from the roof, and brackets under the gallery. The warming apparatus has been supplied by Mr. E. Lumby, of Halifax. The contractors were:—Masons' work, Mr. H. Smith; joiners' work, Mr. J. H. Thorp; slating, Messrs. Watson & Wormald; plumbing, Mr. J. Hall; plastering, Mr. William Garlick. The cost has been upwards of 5,000*l*.

Moulton.—The memorial stones of a new Primitive Methodist Chapel were laid here on the 24th ult. The building adjoins the old chapel, which is to be used as a schoolroom. The design and plans have been prepared by the Rev. W. Wray, of Manchester, in the Italian style of architecture. The area of the building is 51 ft. 6 in. by 33 ft., there being 17 ft. from the floor to the roof. The chapel will be heated by Trusswell & Holden's hot-air apparatus. The cost will be about 800*l*. Mr. Whittle, of Manchester, is the contractor; the brickwork being sub-let to Mr. Lambert, of Altrincham, and the masonry to Messrs. Rathbone, of Northwich.

Tarvin.—The new Wesleyan chapel has been opened for divine service. It is Gothic in style. The memorial stones were laid on the 28th of October, 1874, by Mr. Ellis Davies, of Liverpool, and Mr. J. Simpson, of Runcorn; and the work of erection has been carried on by Mr. Langford, of Tarvin. The walls are of brick with stone dressings. The chapel proper provides accommodation for about 160 persons, the back part of it being raised slightly. On the right of the rostrum is the schoolroom, which is open to the chapel, and this will seat 100 more persons. The vestry will also be utilised, and forty persons can be seated there if necessary. The total number of sittings is 300. When not in use the vestry and schoolroom will be shut off from the chapel by folding doors. The cost of the building, including heating, lighting, fencing, &c., is 700*l*. The architect was Mr. John Wills, of Kingsbridge.

Litherland.—A new Wesleyan Chapel has been opened here, situate in Wilson's-lane, facing Litherland-park. It comprises, in addition to the chapel proper, a Sunday-school, band-room, society class-room, and a chapel-keeper's house. The design is in the Gothic style. The material used is grey brick, relieved by bands of coloured pressed bricks and red stone dressings. The south side of the chapel is divided into four bays by buttresses projecting from the wall line, and ascending in two set-offs formed by diagonal brickwork; each bay contains a two-light win-

dow terminating with pressed brick arches, and stone keys. At the rear of the chapel is a house for the chapel-keeper. The main front of the chapel is pierced by a two-light window on each side of the porch, the centre of the gable over the porch being formed into a bay by a large pressed brick arch, and pierced with a three-light window. The porch-entrance is formed by a Gothic brick arch, with moulded stone label, terminating at the spring on carved bosses. On the right of the entrance, and forming a wing from the body of the chapel, are the school, class, and band rooms. At the rear of the school-room, in proximity to the pulpit, is the minister's vestry. The inside dimensions of the chapel are 50 ft. by 33 ft., and it will accommodate about 320 persons. The roof is spanned by three open principals in varnished pitch-pine springing off stone corbels. The principals and purlins are the only wood-work exposed in the roof; the walls are finished stone face, and the ceilings, which are 30 ft. from the floor, are finished white. The pulpit and communion are spanned by a large labelled arch, and terminate on carved bosses. The seats are open-framed pitch-pine, with filled-in sloping backs, and have book-boards and hat-racks, the whole being varnished. The chapel and school and class-rooms are lined with pitch-pine wainscot, 4 ft. high, and finished with moulded capping. Both chapel and school are heated by hot water. The contract has been carried out by Mr. Wm. Roberts, of Liverpool; Mr. C. W. Mullin, of Walton-road, being the contractor for the joiner work. The estimated cost is about 1,600*l*. Mr. Stephen Middlebrook, of Walton, was the architect.

West Bromwich.—The memorial stones of the new Wesleyan Chapel at Carter's-green, which will stand at the junction of the Wolverhampton and Dudley main roads, have been laid. The building is in the Early English style of architecture, and will be built with red bricks and stone dressings. The sittings will be of pinewood, stained and varnished, and will seat 450 persons; but the place is so constructed that galleries,—which will accommodate 350 worshippers,—can at any future period be erected. The cost is estimated at about 4,100*l*. Mr. Loxton, of Wednesbury, is the architect, and Mr. Trow, of the same place, the builder.

Southport.—A new Methodist New Connexion Chapel has been opened in this town. Its site is in Manchester-road. The six memorial-stones were laid by lady friends nearly twelve months ago. The style of the building may be termed Italian treated to suit modern requirements, and will seat about 250 persons on the ground-floor. The architects are Messrs. Mellor & Sutton, of Southport. The contractor for the work is Mr. T. Cheetham, of Liverpool and Southport; Mr. Philip Richards, of Liverpool, is the subcontractor for brickwork; and Messrs. Johnson & Co., for plastering.

Batley.—On the 8th ult. the foundation-stone of a new chapel and school, in Taylor-street, Batley, for the Methodist New Connexion denomination, was laid by Mr. John Jubb. The congregation worshipping at Zion Chapel had become so numerous that it was found necessary to erect another chapel and school, and the site selected is in a new part of the town, where the population is rapidly increasing. The new structure, which will be in the modern style of architecture, and is estimated to cost about 2,600*l*., will be built from designs by Mr. John Law, architect, of Batley, and will accommodate upwards of 400 persons in the chapel, and 275 scholars in the school.

A NEW CEMETERY AT BLOXWICH.

ON the 27th ult., the Bishop of Lichfield consecrated the Established Church portion of a new cemetery at Bloxwich, provided by the Walsall Town Council for that district. The area of the land enclosed is six acres, situated in Holly-lane. In the centre are two chapels, in Gothic style, one intended for Nonconformists, and the other for members of the Establishment, each 33 ft. by 16 ft., with a robing-room, 9 ft. square, attached. These are divided by an archway, with a moulded arch at either end, springing from coloured stone columns, with carved capitals; and above this rises a square tower, which forms the base of an octagon stone spire, 70 ft. high. The walls of the buildings are faced with pressed red bricks, with Attleborough stone dressings to the buttresses and angles, and Codsal Wood stone for the shafts, columns, and bands. In the western elevation are two tracery Gothic windows, glazed with cathedral glass, and stained margins; and over each porch is a window in keeping with the general design, with coloured stone columns, carved capitals, moulded arches, labels, and heads. The internal fittings, viz., seats and reading-desks, are of pitch pine, and the roofs are open, and stained and varnished. The sexton's lodge, built with red bricks, with blue and white brick bands and dressings, is in the Modern Gothic style. The grounds have been planted by Mr. Parnell. All the work has been designed by Mr. J. W. Boys, borough surveyor. The contractors were Messrs. Rowley & Lynex. The cost of the buildings was 3,700*l*., and the total cost of the cemetery 5,000*l*.

VALUE OF LAND IN THE CITY.

SOME ground in Clement's-lane, City, was disposed of last week (Messrs. Fox & Bousfield, auctioneers), when 3,880 superficial feet obtained a ground-rent of 2,230*l*., or nearly 11*s*. 6*d*. per foot. Lease, eighty years.

Instructions have been given by the purchaser, Mr. Thomas N. Stokes, to Messrs. Batterbury & Huxley, architects, to prepare plans for new offices about to be erected on the site, at an estimated cost of 12,500*l*.

COMPENSATION TO WORKMEN FOR ACCIDENTS.

A BILL is now before Parliament "to provide for Compensation to Workpeople engaged in common Employment in Cases of Injury by Accidents when employed."

It extends the jurisdiction of county-court judges to the objects and purposes of the Act, and provides that it shall not be any ground of defence to an action brought by a workman for compensation for injuries received in the course of employment, that the person by whose negligence the injury was occasioned was employed in a common employment with the person injured, or the risk of injury was knowingly or voluntarily incurred.

It is also provided that actions must be brought within three months, but the amount of compensation shall be limited to 200*l*.; that allowances from sick and provident funds are to be taken into account; and that the Act is not to extend to persons who do not employ *more than ten workmen*.

Books Received.

A History of Caricature and Grotesque in Literature and Art. By THOMAS WRIGHT, M.A., F.S.A. London: Chatto & Windus.

THIS, which appears as a new work, is, if we mistake not, a re-issue by the enterprising publishers whose names are attached to it, of a book which was before the public, in its original form, a good many years since. The intention of the work is, as stated in the author's preface, to follow the subject chiefly "through those branches of it which have contributed most towards the formation of modern comic and satiric literature and art in our own island"; some such limitation being necessary in order to bring the subject within the limits of a convenient sized volume. During the feudal period the point of the grotesque and satirical productions of one nation can hardly be understood without a general knowledge of the whole literature of Western Europe; it is only subsequently to this that the literature of each separate country becomes more entirely its own. "Thus the satirical literature of the Reformation, and political caricature, had their cradle in Germany, and in the earlier half of the sixteenth century carried their influence largely into France and England; but from that time any influence of German literature on these two countries ceases. Modern satirical literature has its models in France during the sixteenth century, and the direct influence of this literature in France upon English literature continued during that and the succeeding century, but no further. Political caricature rose to importance in France in the sixteenth century, and was transplanted to Holland in the seventeenth; and until the beginning of the eighteenth century England owed its caricature, indirectly or directly, to the French and Dutch; but after that time a purely English school of caricature was formed, which was entirely independent of Continental caricaturists."

Accordingly, Mr. Wright takes his readers, after commencing with a general sketch of what is known of caricature in Roman literature, through the various forms which it assumed in the Middle Age period, and which aim mostly at little more than coarse joking, with a more general than special point, until, in the sixteenth and seventeenth centuries, caricature enters more decidedly into the field of politics, and becomes an important agent in the attack on obnoxious Governments, and their projects and weaknesses. The most effective part of Mediæval caricature is in the subjects of *diablerie*, of which Callot was a noted author; but Mediæval caricature generally is on a wrong principle, and only appeals to a very childish order of understanding; consisting much more in a conventional putting together of certain emblems, such as heads and limbs of different animals attached to the body of a man, each of which had its own meaning, understood by those to whom it was addressed, so long as it was recognisable, whether well or ill drawn. It was only in times much nearer to our own day that the school of artistic and intellectual caricature was formed, which attacked by seizing and humorously exaggerating the features and character of a face, or the position of the political situation which it was desired to bring into ridicule. This order of caricature, as it was carried out by the best of the modern satirists, requires real wit and considerable power of draughtsmanship; the latter quality being possessed in especial by Gillray, whose carefully-drawn exaggerations of the physiognomy of his victims are as precise and finished as possible. A consideration of these works, so near our own day, shows how much we have progressed in refinement and charity during that comparatively short interval: the caricatures of the days of the French war and of the Regency being absolutely cruel in comparison with anything that would be tolerated now. The kind of general glance at the subject, afforded by such a volume, hardly raises our idea of the wit of the human race; a very large proportion at least of the caricature on record being rather remarkable for mere coarseness and buffoonery than for anything which deserves the name of humour; but it gives a valuable insight into the ways and feelings of past generations. The book will be found interesting.

VARIORUM.

"THE Skeleton at the Plough, or the Poor Farm Labourers of the West" (*Beehive* Office, Bolt-court), is a little book which also includes "the Autobiography and Reminiscences of George Mitchell, one from the Plough." Mr. Mitchell has so good a cause, and has assisted in bringing about already so much improvement in the condition of a depressed class, that he could afford to do without the sensational title and ugly engraving with which he has headed his book, and which enables opponents to fix on it the title exaggeration. His case would be much stronger without these. Of Mr. Mitchell's own career we have before now spoken. It is a very remarkable one, and should serve to encourage others equally ill placed. He ran away from his work as a half-starved plough-boy; got some little knowledge of stone-working at Ham Hill, and now, notwithstanding losses and disasters, is a prosperous tradesman. Whether or not we agree with him in all his opinions, we can praise him for the determination and disinterestedness with which he pursues a course he thinks likely to benefit a much-neglected and down-trodden portion of society.——We will not pretend to limit the number of editions through which the June number of the *Contemporary Review* will run. Attention has been adventitiously directed to an article in it on the Life of the Prince Consort and the Court of Queen Victoria, by the attribution of it to Mr. Gladstone, and we have no doubt correctly, but the beauty of the article is such that we are satisfied the desire to read it will extend with the reading of it.——The Birmingham correspondent of the *Engineer* says as to Foreign Competition:—"This afternoon the market was astonished to learn that the makers of railway spikes and bolts in Belgium are underselling Staffordshire makers by the enormous difference of 8*l*. per ton. At a price embracing that difference they have just taken an order virtually from our own Government, for the East India Railway; yet it has been usual for certain of the orders for that line to come at this season into this district. Orders for spikes for Finland the Belgians have also

wrested from us by a difference of fully 4*l.* to 5*l.* per ton. Further, we have just been largely undersold by firms in France, which have well beaten us in competition for an order for nuts and bolts distributed by the London, Brighton, and South Coast Railway. All this is taking place at a time when the assumption of operative nut and bolt makers as a trade organisation is something remarkable. In illustration of what they are doing, I cannot do better than report that a special meeting of the executive committee of the National Amalgamation of Nut and Bolt Makers, at a public-house, at Darlaston, the following 'special business' was transacted: — The council took into consideration the resolutions adopted by the conference, 'That this conference do not allow any members of this association to carry their work to the warehouse, or from the wagon, or to the shears. Any member doing so shall be fined 2*s.* 6*d.* And that the executive council give such employers notice that such system will be discontinued when considered desirable by the council.' 'That employers provide olivers for nut and bolt makers who are members of the association.' Having discussed both resolutions, it was resolved 'That a circular be sent to each employer, where it is the practice of carrying iron from the work to the warehouse, informing them that such a system will be discontinued on and after a month on Saturday week'; and 'That on and after the same date each employer must supply each bolt-maker with an oliver irrespective of sizes, and all nut-makers with olivers from ⅜ upwards.' Hereabouts it is well known in the trade that the very best forks for all kinds of agricultural uses are being made, and so extensive is the usual demand in spring and in summer, that ironmongers are seldom able to supply their necessities if they should not have forecasted that demand. To the satisfaction of the ironmongers, but by no means so to the edge toolmakers, this seems likely to be reversed. United States forks are now being sold in this market which are 15 per cent. lower in price, and in quality 20 per cent. superior to the best English product. The implement merchants of this district are good judges of such articles; and it is somewhat alarming that by certain of these, orders should have been given for as many as 100 dozen in one line."

Miscellanea.

Victoria (Philosophical) Institute.—The Radcliffe Observer (Rev. Robert Main, F.R.S.) delivered the address at the ninth annual meeting of this Institute, which was held on Monday evening last, at the house of the Society of Arts. The room was crowded. The address itself was in three sections:—1. A sketch of most important discoveries in physics, chiefly astronomical, which have been made during the last few years; 2. A slight review of some of the most startling assumptions in two recent publications,—namely, Mill's "Essay on Theism," and Strauss's "Old and New Faith"; 3. A consideration of the Atomic Philosophy in connexion with Dr. Tyndall's Belfast address. Mr. Main concluded with these words:—"With regard to physical science, I think we have seen that its real advances are in favour of religious faith. The mysterious atom in which some can see the 'promise and the potency of all terrestrial life,' has, to my mind, brought God nearer to us. We now see the elements of which it has pleased Him to make the worlds; we see the presence of that one Supreme Intelligence as distinctly in the weed that grows and the flower that blossoms on our own planet, as in the stars and nebulæ, which at still unmeasured or unimagined distances reflect His glory and proclaim His unvarying laws." The Lord Mayor having moved a vote of thanks, after some remarks by Lord Shaftesbury, Lord Harrowby, the Bishop of Llandaff, and others, the members and their friends assembled in the Museum, where refreshments were served.

Hotel and Aquarium, Great Yarmouth. Great Yarmouth, we are informed, is to have a new hotel, to which is to be attached an aquarium, a large skating-rink, a winter garden, a music-hall, and a ball-room. The site acquired is situated on the marine drive, immediately opposite the Britannia Pier, and bounded on the north side by the Regent-road, which is to be widened to give better access to the building. Mr. Edward L. Paraire, of London, is the architect engaged.

The Lewes Waterworks. — The efforts which the Lewes Water Company have been making during the last few months to obtain a new and abundant supply of water from sources, the purity of which is beyond all question, have resulted successfully. The construction of the necessary works was entrusted to Messrs. Easton & Amos, and the manner in which they have carried out the task has, we understand, given satisfaction to the directors. A new well has been made, 24 ft. deep, by the sinking of four iron cylinders, 6 ft. in diameter, and these have been carefully joined together to prevent the possibility of water entering from the outside. The bottom has also been cemented, so that in fact the cavity is completely water-tight. Through the centre of the bottom of the well a "boring" has been executed 116 ft. deep, lined with iron pipes 14 in. in diameter, securely joined: the top end of the tube thus formed projects some few inches above the cemented bottom of the well. Therefore at the present moment every drop of water pumped from the well must come from a depth of 140 ft., through the chalk rock which during the borings was found to be very hard. During the progress of the work tests were frequently applied, and although good water could be obtained at a much less distance than that to which the supply tube has been carried, yet it was not sufficiently profuse to be depended on as a source of constant supply, and therefore the works have been carried out to the extent already indicated. The result is that when the pumps are not at work the well remains filled to within 2 ft. of the top of the uppermost of the four iron cylinders. When the pumps are in operation 1,100 gallons of water are drawn per minute.

Royal National Hospital for Consumption at Ventnor.—A grand fancy bazaar will be held in aid of this hospital on Wednesday, Thursday, and Friday, the 16th, 17th, and 18th of June, 1875, at the Duke of Wellington's Riding School, Knightsbridge. A large sum is required to furnish the houses, to construct the subways, roads, drainage-works, &c., and to provide for the maintenance of the largely increased number of patients, there being no endowments. In addition to the articles usually to be found in most bazaars, some of the stalls will be furnished with very handsome and valuable gifts, notably two stalls with Oriental and Japanese laquered ware, obtained expressly from Japan. A special feature in connexion with the bazaar will be a gallery of paintings in oil and water colours, which will be hung in a conspicuous position. Mr. Cremer will, for two days of the bazaar, give entertainments of conjuring, and the Band of the Royal Horse Guards (Blues), and the Band of the 2nd Life Guards will attend. Such promises ought to draw a large attendance. We hope they will.

Birmingham and District Architectural Association.—On the 28th ult., the first annual meeting of this Association was held at Temple-row, under the presidency of Mr. J. J. Bateman. There was a good attendance of the members, and the reports of the secretary and treasurer were read to the meeting. The President, in his address, congratulated the Association upon the success it had already attained, both with regard to the work done and its financial position; and impressed upon the members the necessity of a thorough study of scientific construction. He referred particularly to the satisfactory way in which the Association was working, and announced his intention of giving a sum of 5*l.* 5*s.* to the prize fund. The prizes for designs submitted during the past session were awarded to Mr. J. W. Fisher (who received especial commendation for his work), and Mr. A. F. Greening. The usual vote of thanks having been given to the president and other officers, the members of the Association adjourned to the Royal Hotel, where a supper had been prepared, and a pleasant reunion terminated the evening's proceedings.

Deceptive Promises to Emigrating Masons. — A large number of stone-masons arrived at Ontario lately from Scotland, where they had been engaged by a person representing himself as agent for the contractors engaged in the enlargement of the Welland Canal. They were promised $3 a day and steady work, and left Scotland in good faith for the scene of their engagement. Arrived, however, at St. Catherine's, in Ontario, where the principal work is now going on, the contractors repudiated any such agreement, stating they never authorised any agent to engage men, and in fact did not require any more hands.

The Bradford Carpenters and Joiners and their Employers.—A meeting of operative carpenters and joiners was held at Bradford on the 2nd inst., and the following resolution was adopted:—"Resolved — Having heard through the press the decision of the employers at last night's meeting, we repudiate the statement that we have either directly or indirectly had recourse to intimidation towards our fellow-workmen; also the statement made by the employers, that many firms had not signed the rules as proposed, is a statement contrary to facts well known by the members of the Employers' Association. Seeing they have assumed such a defiant attitude, we take steps to meet their resolution by preparing ourselves for a determined struggle. The time has gone by for entertaining any compromise with them." At a meeting of the men held at the Sun Hotel, Shipley, the same resolution was unanimously adopted.

Restoration of Norton Church, Gloucester. — Efforts are being made to restore the ancient church at Norton, five miles from Gloucester, to complete the parish schools, now in course of erection, and to provide suitable accommodation at the vicarage. The church at Norton was founded by the priory of St. Oswald, in this city. It is a landmark, perched on a hill which commands views of the vale of Gloucester. The tower is an example of the solid masonry of former days; and attached to it are a nave and chancel. But internally and externally the fabric is, according to Messrs. Waller & Son, the architects, "in a most lamentable condition, and, owing to the defective state of the roof of the nave, almost unfit for public worship." The vicarage is to be enlarged, and the church renovated. The estimated cost is thus set forth: — Church, 1,100*l.*; vicarage, 960*l.*; schools, 880*l.*; total, 2,940*l.*

The Sewerage of the Potteries.—At a recent conference at Hanley the surveyors to several local governing bodies were requested to consider the subject and report the conclusions to which they came. We are given to understand that these gentlemen have met, and that, on their behalf, Mr. Lobley, the surveyor to the Hanley Town Council, has drawn up an exhaustive report. They have come to the conclusion that they cannot advise the local authorities to combine to deal with the sewage of the Potteries by irrigation on the gravitation principle. This conclusion was forced upon them by the difficulty which would be found in obtaining within a short distance sufficient land of a suitable description, and by the great cost of constructing a covered sewer to and beyond Tittensor.

Number of New Churches in England and Wales, from A.D. 1,800 to Present Time.—At the sittings of the Committee on the Public Worship Facility Bill, Canon Gregory, who was examined, said that 4,210 new churches had been consecrated in England and Wales during the present century; and he considered that the Established Church of England should find accommodation for 30 per cent. of the population. The average number of churches built each year, according to the Canon's statement, stands, therefore, at fifty-seven, or rather more than one a week; but taking Roman Catholic and other Nonconformist churches and chapels into the list, it may be fairly assumed that, since the year 1,800, at least 100 sacred edifices of all denominations have been yearly built in England and Wales.

Destructive Fire at Wardie, near Edinburgh.—The workshops occupied by Messrs. Sutherland & Son, builders and house carpenters, Wardie-road, together with a valuable stock of wood stored in an adjoining yard, were recently destroyed by fire. The building in which the fire originated was a brick erection, two flats in height, and 130 ft. in length,—the lower flat being fitted up with sawing, mortising, and other machines, while the upper floor was set apart as a workshop for the men. About five years ago the workshops at this place were burned down, the woodwork in part of the building having at that time been ignited by a spark from a locomotive engine passing along the Granton line, which runs past within a few feet of the back of the tenement.

"The Baptism of Christ in Jordan."—The painting by Mr. E. Goodwyn Lewis, which was recently on view at the Metropolitan Tabernacle, and also at Dr. Landell's Chapel, Regent's Park, has been sold for 1,000*l.* The picture (8 ft. by 5 ft.) contains about 300 figures. It is to be engraved.

The East. — The stonework of the new Arsenal, in course of erection on the plateau of Matchka, above Beshiktash, is now finished. This fine building will be ornamented with a columned portico. The Russian Hospital at Pancaldi, and the chapel attached to it, are also approaching completion.——The Athens correspondent of the *Kölnische Zeitung* (Cologne Gazette) announces that the buildings which are to form the focus of the great works of archæological exploration at Athens will be ready for use by the middle of May, when the German directors of the undertaking will enter upon their new quarters. The road from the coast to the plain of Olympia will also, it is hoped, be speedily completed, and it is therefore anticipated that the work of excavation may be systematically organised as soon as the summer heats are over.

Improvement in Buildings.—Mr. Macleod, of Manchester (manager of the Limmer Asphalte and Concrete Company), has patented some improvements in constructing buildings of concrete and other plastic material, which consist in mixing cement, asphalte, plaster, and other cementing materials together, by spreading one of them on small gravel, and then applying the other, thereby causing them to unite and adhere together. His apparatus consists of improved wall gauges and wall braces; also in tie-rods with slotted ends; also in supporting scaffolding, clamping plates, and other articles by pudlocks; also in securing the framing by T-clamping plates; also in various hand-tools to be used in combination with the above apparatus.

The Stonehouse (Devon) Infirmary.—The Stonehouse Board of Guardians have been inviting tenders for building additions to the infirmary, and on the 13th of May there were received:—Mr. Partridge, 950*l.*; Mr. T. Taylor, 805*l.*; and Mr. Verren, 682*l.* The Board accepted the latter tender, but on the following Board day received a note from Mr. Verren informing them that he could not carry out the work for the price named. The Guardians thereupon departed from the custom of taking the next lowest tender, and again advertised for tenders, receiving the following:—Mr. Williams, 817*l.* [2*s.*; Mr. Taylor, 810*l.*; Mr. Verren, 783*l.* The latter was once more accepted, but outside the Board the greatest dissatisfaction is manifested.

New Schools at North Stoneham.—On the 2nd inst., the foundation-stone of the proposed new schools for this village was laid by Mrs. J. B. Fleming and her young son. The schools will be built of red brick, and will include boys' and girls' school-room, each measuring 34 ft. by 18 ft., with a residence for the master adjoining. Messrs. Brinton & Bone are the builders; Mr. C. Pink, architect; with Mr. Micklan as clerk of the works; and we hear that nearly the whole of the money required, about 1,100*l.*, has been collected. The site is in a meadow on the road from the rectory to the village.

Dwellings for Police Constables.—At a meeting of the Court of Common Council, on the 27th ult., the Coal, Corn, and Finance Committee reporting on the reference of the 15th of April last, recommended that the sum of 8,200*l.* for the erection of dwellings for married police-constables, in Rose-alley, Bishopsgate, be provided out of the reserve fund, and that in respect thereof there be paid by the police committee to the reserve fund a sum annually equivalent to interest at the rate of 4*l.* 10*s.* per cent. On the motion of Mr. J. E. Saunders, the chairman of the committee, the report was adopted without dissent.

Bequests to Owen's College and Sheffield and Leicester Mechanics' Institutes.—Mr. Charles Clifton, an engineer at New York, has recently died suddenly, possessed of considerable property, the bulk of which he has left to Owen's College, at Manchester. He has made bequests of 250*l.* each to the Mechanics' Institutions at Sheffield and Leicester; but, unfortunately, the latter place is not now possessed of a Mechanics' Institution. It is expected that either the Free Library or the Museum authorities will put in a claim for the legacy.

A New College.—Messrs. T. E. Murray and G. H. Thomas, architects, have been instructed to prepare plans, and procure tenders, for a new college at Birkdale. The cost will be about 10,000*l.*

The Spire of St. Peter's Church, Hereford.—It appears that the vane of St. Peter's Church has failed to act properly ever since it was fixed, and a workman named Taylor, of Nailsworth, Gloucestershire, has been engaged to put it into working order. In consequence of the great height of the spire, the task, as may be imagined, was no easy one, and great preparations were made before the top of the spire could be reached. Perseverance, however, was ultimately rewarded with success, and on the 2nd inst., Taylor succeeded in accomplishing the feat of gaining the top. With the assistance of ladders the work was completed on the 5th.

Oxford Drainage.—Mr. Robert Rawlinson, C.E., one of the Chief Inspectors of the Local Government Board, held an inquiry on the 31st of May in reference to the application by the Board for authority to borrow a further sum of 100,000*l.* for drainage works. After receiving the evidence of the Engineer on the works in progress and the estimate, he proceeded to view the works themselves and the proposed irrigation farm, and authorised the Chairman of the Drainage Committee to express his approval of the way in which the works were being executed, and of the suitableness of the irrigation land.

Erection of a New Railway Bridge.—The foundation-stone of the Severn Bridge Railway, near Sharpness, connecting the Forest of Dean with the new docks there, was laid by Mr. Lucy, of Gloucester, who is the chairman of the Company, on the 3rd inst. The bridge will be 1,320 yards in length, and the contract has been let to the Hamilton and Windsor Iron Company, Liverpool, at 190,000*l.*, and the railway work at 90,000*l.* to Messrs. Vickers & Cook, Westminster-chambers, London. The directors and engineers of the Company, with representatives of important interests, witnessed the ceremony, together with a large number of Foresters.

Kelly College.—The memorial stone of Kelly College, Tavistock, laid recently, as already mentioned, by the widow of its founder, Admiral Kelly, is a well-selected piece of granite weighing about eight tons, having been reduced from a large block upwards of 40 tons in weight. It is a fine-grain hard granite, and the block has been very neatly worked on the exposed surfaces, having a sunk moulded panel in the front end in which a suitable inscription is to be engraved. The stone was supplied by the Gunnislake Granite Company (Messrs. Crocker), and was produced, we understand, in a very short space of time.

Surveyor of the Highways, Kidderminster.—The Board of Guardians proceeded to the election of a surveyor of highways, in the room of Mr. Thornburgh, whose death took place some weeks ago. There were sixteen candidates for the office, and a very close contest ensued, Mr. Thornburgh, jun., son of the late surveyor, ultimately being elected by a very narrow majority. The situation is, we believe, worth about 300*l.* a year. We are informed that Mr. Thornburgh owes his election to the representative guardians, the *ex officios* being in favour of a gentleman from Weston-super-Mare,—a Mr. Jones.

The New Lunatic Asylum, Portsmouth.—At a meeting of the town council, the town clerk, in answer to Mr. Cunningham, said the architect had informed him on the previous day that everything had been supplied to the contractor for the new asylum to enable him to proceed with the works at once. Mr. Cunningham also called attention to the fact that the youngest of thirty-two candidates had been chosen by the gaol committee as clerk of the works, and asked whether it was usual for the committee to appoint the clerk of the works. The town clerk replied affirmatively.

Stonemasons' Strike at York.—The strike of stonemasons at York, which commenced on the 1st of May, still continues, and at present there seems not the slightest approach to concession on either side. The masters having taken care in their contracts to include a proviso in the case of strikes that during their continuance the time should be reckoned when work was stopped, they are content to allow the matter to rest on this basis until the men return to their employment on the old terms.

Railways in Persia.—German newspapers show that a new scheme for railways in Persia has been secretly arranged, in the interest of Russia. M. Pressel, an eminent Austrian engineer, is the author of it.

"Penny-wise and Pound-foolish."—The rich corporation of Sunderland have just set an example of economy that is highly approved by burglars, garotters, thieves, and bad characters in general. The chief constable of the borough informed the magistrates that in consequence of the corporation issuing orders that no lamps were to be lighted during the summer months, the streets and houses were decidedly unsafe, as his limited number of men were unable to prevent burglaries, robberies, and assaults, owing to the darkness, and identification of offenders was impossible.

Temple Bar.—The Metropolitan Board of Works, on the 4th inst., referred three alternative proposed alterations in the neighbourhood of the new Law Courts and Temple Bar, and a letter from the Commissioners of Sewers accompanying the same, to the Works Committee for them to receive a deputation from the Commissioners of Sewers for the purpose of conferring generally with regard to what improvements the Metropolitan Board of Works should identify themselves with in regard to the suggested alterations.

Conistone.—The memorial stone of a new Wesleyan Chapel was laid at Conistone on Tuesday in last week by Mr. F. Barratt. The building will be in the Early English Gothic style, built with the blue stone of the neighbourhood, freestone dressings being used for the windows, doorways, and buttresses. The interior will have an open pitch-pine roof. Sittings will be provided for about 150. Mr. Eli Cox, of Kendal, is the architect; and Mr. Bell, of Conistone, the contractor

New Chapel at Barnsley. — On Monday afternoon the foundation-stone of a new chapel about to be erected by the Primitive Methodist body in Buckley-street, Barnsley, was laid by Mr. H. Lodge, coal owner of Barugh; whilst memorial stones were laid by Mr. Councillor Rymer and others. The chapel will be a substantial stone building in the Italian style of architecture, capable of accommodating 500 persons, and is estimated to cost about 2,400*l.*

New Chapel at Hastings.—On the 25th ult. the memorial-stone of a new Wesleyan Methodist Chapel, on the Cornwallis Park Estate, Hastings, was laid by Mrs. Brassey, wife of the senior member for the borough. The situation is very good. The chapel with site will cost about 7,000*l.* The number of seats provided will be 900. Mr. W. W. Pocock is the architect, and Messrs. C. & H. Hughes are the builders.

Sale of Serjeants' Inn.—The London Correspondent of the *Manchester Guardian* says:—"As the Judicature Bill has abolished the title of serjeants-at-law, the members of Serjeants' Inn, in Chancery-lane, have determined to sell that property and divide the proceeds among themselves. The value cannot be less than 30,000*l.* or 35,000*l.*, so that each of the thirty-six gentlemen who now wear the coif will receive a handsome sum.

Regent's Park Explosion.—At the meeting of the Marylebone vestry, on the 3rd inst., Mr. Greenwell, vestry clerk and solicitor, read a letter from Sir Thomas Chambers, Q.C., M.P., dated House of Commons, May 27th, 1875, stating that in answer to a question he lately put to Lord Henry Lennox, he had been assured that already orders had been given for the preparation of plans for the restoration of the destroyed Macclesfield Bridge.

Fatal Accident in the Borough.—On the 3rd inst., a shocking accident happened at Messrs. W. H. Lee's lead manufactory, Market-street, Borough, by which a man named James Doland, aged 47, a foreman, was killed. It appears a large stone, weighing 16 cwt., was being pulled up by five or six men, when the chain broke, and the stone fell on deceased, crushing him to death.

Scientific Simplicity. — The beautiful simplicity of chemical terminology is strikingly exhibited in a paper by M. Hoyduck in a late issue of the "Annalen der Chemie," on ortho-amido-toluene-para-sulphonic acid. The author deals with introthobromo-toluene-para-sulphonic, amidorthobromo-toluene-para-sulphonic, and tribromo-toluene-para-sulphonic acids in the same paper.

The Spire for Christ Church, Whitley.—The new spire of this church is now completed. It forms a conspicuous and pleasing architectural feature, and being situated on high ground, can be seen for miles round.

A Woollen Manufactory at Pompeii.—One of the latest discoveries at Pompeii is a small woollen manufactory, situated very near the house where the fresco representing Orpheus was recently discovered. Several charred fragments of tapestry were found in this place, besides various machines for carding and weaving wool.

Strike at the Leicester Municipal Buildings.—The bricklayers engaged in the erection of the New Municipal Buildings struck work on the 1st inst. It seems that Mr. Brass, the contractor, had occasion to discharge one of the society men, when the remainder of the men left work. Dissatisfaction has existed for some time past, the men having been anxious to obtain an increase of from 7d. to 8d. per hour in their wages.

School Board Architects. — The Great Grimsby School Board have elected Mr. Charles Bell, of London, their architect for the new schools there for 1,000 children; Mr. Reynard, of Hull, being awarded the second premium. Mr. Bell has been also appointed architect to the Bourne School Board, for which there were thirteen competitors, but no premiums.

The Royal Society of Artists, Birmingham.—Saturday evening saw the close of the Spring Exhibition of this society—one of the most successful exhibitions on record. The number of visitors exceeds that of last year. The sales have amounted to 3,350*l.*, to which must be added the Art Union prizes, amounting to 350*l.*

Monument to Savonarola.—A monument to Savonarola was unveiled at Ferrari, May 23, in the presence of Prince Humbert and the authorities. Signor Finali and others delivered speeches, dwelling upon the principle of liberty professed by Savonarola. The Agricultural Exhibition was then opened.

Society of Engineers.—At a meeting of the Society of Engineers held on Monday evening in the Society's Hall, Westminster Chambers, Victoria-street, the president, Mr. J. H. Adams, in the chair, a paper on "Continuous Brakes" was read by Mr. St. John V. Day, C.E.

Death from Bad Air.—Three men have been killed by incautiously entering a covered manure-hole in the yard of a livery-stable keeper in Nottingham. Idiots are still to be met with in society who disbelieve in the evils of foul air!

The Band of the Corps of Commissionaires will play every evening after half-past six p.m., in the Cambridge Enclosure, near the Horse Guards' Parade, St. James's Park.

Artisans' Institute.—On Friday, the 4th June, 1875, a paper was read by Mr. Henry James Snell, on "Masters and Men, their Duties and Responsibilities."

TENDERS

For rebuilding "The New Inn," Edgware-road, for Mr. F. W. Hammond. Mr. Henry R. Cotton, architect. Quantities by Mr. A. J. Gale:—

Foster	£7,497 0 0
Axford	7,488 0 0
Shepherd	7,283 0 0
Gould & Brand	7,278 0 0
Foxley	7,137 0 0
McLachlan	7,133 0 0
Newman & Mann	7,116 0 0
Temple & Foster	7,024 0 0
Toms	6,883 0 0
Williams & Son (accepted)	6,807 0 0

For the erection of residence and stabling at Box-grove, Merrow, near Guildford, for Captain Charles Lennox Tredcroft. Mr. A. Guy, architect:—

Mitchell	£3,364 0 0
Moon, Brothers	2,944 0 0
Harris (accepted)	2,850 0 0

For the erection of a school chapel, at Seale, near Farnham, Surrey, for the Rev. Ernest Utterton. Mr. A. Guy, architect. The stone given by Mr. Morton Sumner, of Puttenham Priory, from the Bargate Quarry, and the cartage done by the farmers gratuitously:—

Bolter	£337 10 0
Swan	332 19 0

For reinstating, repairing, and adapting Nos. 1, 2, 16, 43, 44, and 45, Verulam-street, Gray's-inn-road, for the Model Houses Association. Mr. Frank E. Thicke, architect:—

Plant	£443 12 6
Heath	435 15 0

For schools at Kingswood, for the Banstead and Kingswood School Board. Mr. William Smith, architect:—

Taylor	£2,374 17 0
Keal (accepted)	2,268 0 0

For alterations to premises, Cases-street, Liverpool. Messrs. T. E. Murray and G. H. Thomas, architects:—

Wilkinson & Adams	£1,468 0 0
Wilson	1,450 0 0

For inclosing Forest-hill cemetery, for the Burial Board of St. Giles's, Camberwell. Mr. Berriman, architect:—

Willes	£1,630 0 0
Cooper	1,521 0 0
Pearce	1,469 0 0
Fisher	1,445 0 0
Chaffen & Farrow	1,443 10 0
Wainwright	1,425 0 0
Bleskarn	1,420 0 0
Unwin	1,129 0 0
Dover, Son, & Co.	1,109 10 0

For completion of Bramingham, Luton. Mr. T. C. Sorby, architect. Quantities by Messrs. Shoppee & Young:—

Johnson	£11,050 0 0
Lascelles	10,905 0 0
Gregory	10,770 0 0
Lathey, Brothers	10,651 0 0
Patman & Fotheringham	10,600 0 0
Spencer	10,496 0 0
Jackson & Shaw	10,475 0 0
Smart, Brothers	10,365 0 0
Williams	10,250 0 0
Crossley	10,070 0 0

For new day-schools to Baptist chapel, Child's-hill. Mr. W. Allen Dixon, architect:—

Burford	£722 0 0
King	696 0 0
Wright	590 0 0
Carter	570 0 0
Bangs	560 0 0
Staines & Son (accepted)	536 0 0

For the repair and decoration of No. 119, Great Russell-street, Bloomsbury, for Mr. J. McLaren. Mr. John C. Dear, architect:—

Brand	£163 0 0

For the repair and decoration of No. 44, Sydenham-park. Mr. John C. Dear, architect:—

Cohen	£118 0 0

For the erection of business premises, High-street, Deptford. Mr. A. H. Kersey, architect. Quantities by Mr. Henry Lovegrove:—

Slade	£2,262 0 0
Allpress	2,049 0 0
Williams	1,976 0 0
Nightingale	1,949 0 0
Crabb	1,883 0 0
Stimpson	1,880 0 0
Brai', Jopling, & Co.	1,860 0 0
Richardson	1,768 0 0
Batchelder	1,767 0 0
Hammer	1,618 0 0

For new workshops, No. 83, Dean-street, Soho. Mr. Edward Lavender, architect:—

Niblett & Sons	£1,300 0 0
Clarke & Bracey	1,279 0 0
Patman & Fotheringham	1,260 0 0
Nightingale (accepted)	1,183 0 0
Scrivener & White (withdrawn)	1,129 0 0

For rebuilding Nos. 135 and 135a, Tottenham-court-road, for Mr. Gilbert. Mr. G. P. Raggett, architect. Quantities supplied:—

Scrivener & White	£2,330 0 0
Brass	2,325 0 0
Browne & Robinson	2,223 0 0
Clemence	2,175 0 0
Larke	2,133 0 0
Macey	2,090 0 0
Kilby	2,042 0 0
Elkington (accepted)	2,013 0 0

For coach-house, stables, and outbuildings, &c., Erith, Kent. Mr. Herbert Ford, architect:—

Willis	£1,875 0 0
Smale	1,680 0 0
Kirk & Randall	1,617 0 0
Tongue	1,330 0 0

For manager's house, Silk Mills, Tring. Mr. Herbert Ford, architect:—

Smith & Finch	£806 0 0
Chappell	735 0 0
Honour	715 0 0
Snell (accepted)	700 0 0

For alterations to manager's house, Silk Mills, Aylesbury. Mr. Herbert Ford, architect:—

Green (accepted)	£300 0 0

For rebuilding No. 73, Minories. Mr. J. Wimble, architect:—

Bayes & Farnage	£2,245 0 0
Newman & Mann	2,253 0 0
Hoare & Son	2,213 0 0
Scrivener & White	2,175 0 0
Kilby	2,147 0 0
W. & F. Croaker	2,053 0 0

For new porch, and sundry decorative works at Greybury, Edenbridge, for Mr. J. T. Morton. Messrs. Ingram & Hollands, architects:—

Roome	£563 0 0
Feldwick	545 0 0
Colls & Sons	333 0 0
Jordon	295 10 0
Godley	230 0 0
Goodwin (accepted)	205 10 0
Charlwood	185 0 0

TO CORRESPONDENTS.

J. J. D. (we should only mislead if we expressed opinions, in private disputes, on *ex parte* evidence).—F. M. (we are forced to decline giving advice in private disputes).—E. M. (next week).—A. F. G.—F. & G. H.—T. M.—J. B. M. W.—H. F.—F. T.—M. & K.—Major W.—Sergeant P.—C.—E. F.—E. C.—F. P.—E. W.—C. G. C.—J. S. P.—J.—A. G.—Mr. M.—G. S.—E. L. P.—G. M.—S. & S.—A. A. M.—C. G. S.—E. & Son.—M. & T.—H. L.—B. & H.—J. D.—H. St. J.—E.

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